

Number: GMAT
Passing Score: 800
Time Limit: 120 min
File Version: 9.9

REAL-TEST

Graduate Management Admission Test



The Dump provides to the candidates simplified and easy study content.



From the start to the end, it guided me about every minor issue. I found it like a generous guider.



Modified few questions, fixed few spelling mistakes and typos.



This is the best VCE I ever made. Try guys and if any suggestion please update this.



Approved and verified exam questions along with their answers are worth each cent.

Sections

1. Problem-Solving Questions
2. Data-Sufficiency Questions
3. Reading Comprehension Questions
4. Critical Reasoning Questions
5. Sentence Correction Questions

Quantitative

QUESTION 1

What is the least integer that is a sum of four different primes each greater than 20?

- A. 79
- B. 83
- C. 120
- D. 133
- E. 169

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Find the sum of the first 4 primes larger than 20: $23+29+31+37=120$. The correct answer is C.

QUESTION 2

If $X > Y$, the average of X and Y is Z, and the average of Z and X is W, what is the value of $\frac{X - W}{W - Y}$?

$$\frac{x - w}{w - y}$$

- A.
- B.
- C.
- D. 3
- E. 4

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The best way is to take an example: Assume $x=2$ and $y=10$, then their average $z=6$. The average of $x=2$

and $z=6$ is $w=4$. Therefore: $\frac{x - w}{w - y} = \frac{2 - 4}{4 - 10} = \frac{-2}{-6} = \frac{1}{3}$

$$\frac{x - w}{w - y}$$

QUESTION 3

One quarter of the workers at the factory is clerical, one fifth is technical, half are administrative and the other 25 are managerial. How many workers total are there in the factory?

- A. 250
- B. 366
- C. 400
- D. 500
- E. 2500

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

First, calculate the fraction of the 25 managerial workers out of the total number of workers by subtracting the fractions given from 1. The 25 managerial workers are $\frac{25}{x}$ of the workers, therefore, $500 \times \frac{25}{x} = 25$, a total number of 500 workers. The correct answer is D.

QUESTION 4

The price of a product is \$a. Bill bought s products and then sold 80 percents of them \$b. which of the following represents the whole deal if Bill's profit was three times the cost?

- A. $0.8sb = 4sa$.
- B. $(1-0.8) s ab = 3s$.
- C. $3(0.8a - sb) = sa$.
- D. $(s-0.8s) (b-a) = 3$.
- E. $(s-0.8s) / (b-a) = 3$.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

This statement is equivalent to $0.8sb - sa = 3sa$. The income is $0.8sb$, the cost is sa , so the profit is three times the cost.

The correct answer is A.

QUESTION 5

A grocer bought 24Kg of coffee beans at price X. After a while one third of the stock got spoiled so he sold the rest for 200\$ per Kilo and made a total profit of twice the cost. What must be price X?

- A. $66\frac{2}{3}$ \$.
- B. $50\frac{1}{3}$ \$.
- C. $44\frac{4}{9}$ \$.
- D. $33\frac{1}{3}$ \$.
- E. $24\frac{1}{2}$ \$.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The total income is 16×200 . The cost is $24X$, and the total profit is $3200 - 24X = 48X$. The correct answer is C.

QUESTION 6

Kenny is three times older than Bob. In P years he will be twice older than Bob will be Q years later. Which of the following represents Kenny's age comparing to Bob's? (If X = Kenny's age)

- A. $X + P = 6X(P + Q)$.
- B. $2(X + P) = 3X + Q$.
- C. $(X + P)/2 = X/3 + P + Q$.
- D. $3(X + P + Q) = 2X$.
- E. $3X = 2(P + Q)$.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

X is Kenny's age. $X/3$ is Bob's age. Answer C is equivalent to $(X + P) = 2(X/3 + P + Q)$, which means that in P years, X+P is 2 times $(X/3 + P)$ plus Q years. The correct answer is C.

QUESTION 7

A Cuban cigar would cost 1 dollar less than 1.5 times a French cigar, had the French cigar cost 0.7 dollar less than it does now. An Arabian cigar costs 50 cents more than 1.5 times the Cuban cigar. The three cigars together cost 74.7 dollars. What is the price of the French cigar?

- A. 16.7\$.
- B. 23\$.
- C. 25.5\$.
- D. 35\$.
- E. 37.4\$.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Sign the French cigar as X. The Cuban cigar is $1.5(X-0.7) - 1$.

The Arabian cigar is $1.5[1.5(X-0.7)-1] + 0.5$.

The sum of all the three is 74.7. The correct answer is A.

QUESTION 8

Ashley paid 5 dollars for 1 notebook and 1 pencil. If both prices were integers, how many pencils did Ashley buy if she paid 93 dollars for the pencils and for 15 notebooks?

- A. 6.
- B. 16.
- C. 18.
- D. 21.
- E. 26.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

One notebook can cost 1, 2, 3 or 4 dollars. Subtract 15 times each price from 93, and check if what you get is divisible by 5 minus the price of the notebook. The number could be 24, 21 or 33. The correct answer is D.

QUESTION 9

The sum of the ages of 22 boys and 24 girls is 160. What is the sum of ages of one boy plus one girl, if all the boys are of the same age and all the girls are of the same age, and only full years are counted?

- A. 5.
- B. 6.
- C. 7.
- D. 8.
- E. 9.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Changing the equality: $22X + 24Y = 160$, we get: $X =$

$$\frac{80 - 12Y}{11}$$

Since X must be a positive integer, Y must be smaller than 7. The numerator will be 11, 22, 33, 44 etc. Y must be 3 and $X=3$. $X+Y = 7$. The correct answer is C.

QUESTION 10

X percents of the rooms are suits, and Y Percents of the rooms are painted light blue? Which of the following best represents the least Percentage of the light blue painted suits?

- A. $X-Y$.
- B. $Y-X + 100$.
- C. $100X-Y$.
- D. $X+Y-100$.
- E. $100-XY$.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

D shows us the difference between the sum of the percentages and 100 percent. If $X+Y>100$, this percent must be subtracted from the sum $X+Y$ in order to get 100 percent. Sum of sets minus the total equals the congruence. The correct answer is D.

QUESTION 11

David bought 13 BMW cars for a total price of 1,105,000 dollars. If he wants to make a profit of 39,000 dollars in the deal, at what price should he sell one car?

- A. 85,000\$.
- B. 88,000\$.
- C. 94,000\$.
- D. 124,000\$.
- E. 139,000\$.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The buying price for one car is $1,105,000 / 13 = 85,000$. The wished for a car is $39,000 / 13 = 3,000$. So the selling price must be $85,000 + 3,000$. The correct answer is B.

QUESTION 12

Loren bought a roll of cloth and sold it for a 5% profit based on the selling price. If Loren's profit was \$45.5 total on the cloth, how much did it cost her to buy the cloth?

- A. \$455.
- B. \$525.5.
- C. \$675.
- D. \$810.5.
- E. \$864.5.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

5% of the total price of the cloths is 45.5 dollars, multiply this number to get the entire 100% of the total selling price: $(45.5 \times 20 = \$910)$. Now subtract the profit \$45.5 to get the cost: $910 - 45.5 = \$864.5$.
The correct answer is E.

QUESTION 13

In a recent tender, X people participated. 35% of the X people, who made an offer won the specific tender they participated in. 70% of the rest, were disappointed from the result of the tender. Which of the following expressions represents the number of people who weren't disappointed although they didn't win the tender?

- A. $39X/200$.
- B. $25X/50$.
- C. $19.5X/200$.
- D. $35X/250$.
- E. $90X/200$.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$65X/100$ is the number of people who didn't win the tender. 30% of that number is the number of people who weren't deeply disappointed about the fact that they didn't win. $30 \times (65X/100) / 100 = 19.5/100 = 39/200$. The correct answer is A.

QUESTION 14

What is $0.01 \times 5 \times 0.03$ in terms of percent?

- A. 15%
- B. 1.5%
- C. 0.15%
- D. 0.015%
- E. 0.0015%

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Since 0.01 and 0.03 each have 2 decimal places, their product must have 4 ($2 + 2$) decimal places. Because $1 \times 3 \times 5$ is 15, you need to add 2 zeros to get the correct number of decimal places, so the product of 0.01, 5 and 0.03 is 0.0015. To change a decimal to a percentage you multiply by 100 and move the decimal point 2 places to the right, so 0.0015 is 0.15%. The correct answer is C.

QUESTION 15

In a barrel of juice there is 30 liters; in a barrel of beer there are 80 liters. If the price ratio between barrels of juice to a barrel of beer is 3:4, what is the price ratio between one liter of juice and one liter of beer?

- A. 3:2.
- B. 2:1.
- C. 3:1.
- D. 4:3.
- E. 3:4.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Pick numbers: a barrel of beer costs \$40 and a barrel of juice costs \$30 according to the given ratio. One liter of beer will cost \$0.5 and one liter of juice will cost \$1. Therefore the price ratio is 2:1. The correct answer is B.

QUESTION 16

From the starting point in a boat race, one competitor started to sail north at a speed of 1.6 Km/h, the other competitor started to sail west at a speed of 1.2 Km/h. What is the distance in Km between the two competitors after 5 hours?

- A. 10.
- B. 12.
- C. 12.5.
- D. 14.
- E. 15.4.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

One is going north and the other is going west. The distance can be calculated using the Pythagorean theorem. One made a distance of $1.6 \times 5 = 8$ Km, The second one did $1.2 \times 5 = 6$ Km. The distance between them is the square root of $(64 + 36) = 10$ Km. The best answer is A.

QUESTION 17

George can fill Q cans of paint in 3 minutes. If there are R cans of paint in one gallon, how many gallons can George fill in 45 minutes?

- A. $30R/Q$.
- B. $15R/Q$.
- C. $30Q/R$.
- D. $5Q/R$.
- E. $15Q/R$.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

George can fill $Q/3$ cans of paint in one minute. There are R cans in one gallon, so $R/(Q/3) = 3R/Q$ is the time it takes George to fill one gallon (in minutes). In 45 minutes George can fill up $45/(3R/Q) = 15Q/R$. The correct answer is E.

QUESTION 18

If $(4 \# 2 = 14)$ and $(2 \# 3 = 6)$, what can replace $(a \# b)$?

- A. $a \ b$.
- B. $(a+3) \ b$
- C. $a^2 \ b$.
- D. $ab \ 2$.
- E. $ba + 1$.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Plug in the answers.

- A. $(4 \# 2) = 8$. The answer should be 14.
- B. $(2 \# 3) = (2 + 3)^3 = 125$. The answer should be 6.
- C. $(2 \# 3) = (2^2 - 3) = 1$. The answer should be 6.
- D. $(4 \# 2) = (4 \cdot 2) = 8$. This is the right answer; check $(2 \# 3)$ also.

The correct answer is D.

QUESTION 19

In a rectangular coordinate system, what is the square root of the area of a trapezoid whose vertices have the coordinates (2, -2), (2, 3), (20, 2), (20, -2)?

- A. 7.5
- B. 9
- C. 10.22
- D. 12.25
- E. 14

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Draw the x and y-axes, then plot the points and connect them. The area of a trapezoid is $(\text{base1} + \text{base2}) \times (\text{height}) / 2$. Base1 = 5, base2 = 4, height = 18 thus the area is $9 \times 9 = 81$. The answer to the question is the square root of 81, meaning 9.

The correct answer is B.

QUESTION 20

If the least common multiple of two prime numbers x and y is 10, where $x > y$, then the value of $2x + y$ is

- A. 7
- B. 9
- C. 11
- D. 12
- E. 21

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The only prime numbers that satisfy this condition are 2 and 5. Since $x > y$, $x = 5$ and $y = 2$. Therefore, by substitution, $2(5) + 2 = 10 + 2 = 12$.

QUESTION 21

What is the product of 6% and 14%?

- A. 0.00084
- B. 0.0084
- C. 0.084
- D. 0.84
- E. 8.4

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Convert 6% to its decimal equivalent of 0.06 and 14% to 0.14. The key word "product" tell you to $0.06 \times 0.14 = 0.0084$, which is choice b. multiply, so 0.06

QUESTION 22

A taxicab fare costs x dollars for the first quarter of a mile and $\frac{1}{4}x$ dollars for each quarter of a mile after that. How much will the total cost be for a $2\frac{1}{2}$ mile ride?

- A. $3x$
- B. $\frac{13}{4}x$
- C. $10x$
- D. $\frac{5}{4}x$
- E. $2.5x$

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$2\frac{1}{2}$ miles divided by $\frac{1}{4}$ is ten quarter miles. Since the first quarter mile costs x amount, the other nine quarter miles cost $\frac{1}{4}x$, so $9 \times \frac{1}{4}x = \frac{9}{4}x$. $x + \frac{9}{4}x = \frac{4}{4}x + \frac{9}{4}x = \frac{13}{4}x$.

QUESTION 23

: 48

Which of the following measures could form the sides of a triangle?

- I) 3, 3, 5
- II) 6, 6, 12
- III) 1, 2, 3

- A. I only
- B. II only
- C. III only
- D. I and II only
- E. II and III only

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The sum of the measures of the two shorter sides of a triangle must be greater than the longest side. Since $3 + 3 > 5$, statement I works. Since $6 + 6 = 12$ and $1 + 2 = 3$, they do not form the sides of the triangle. The answer is statement I only.

QUESTION 24

Scott's average (arithmetic mean) golf score on his first four rounds was 78. What score does he need on his fifth round to drop his average score by 2 points?

- A. 68
- B. 72
- C. 78
- D. 88
- E. 312

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If the average of four rounds is 78, then the total points scored is $78 \times 4 = 312$. If his score were to drop 2 points that means his new average would be 76. A 76 average for five rounds is a total of 380 points. The difference between these two point totals is $380 - 312 = 68$. He needs a score of 68 on the fifth round.

QUESTION 25

Celeste worked for h hours each day for d consecutive days. If she earns \$9.50 per hour, what is the total amount she earned?

- A. $9.50/d + h$
- B. $9.50 + d + h$
- C. $9.50 + dh$
- D. $9.50h + d$
- E. $9.50dh$

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Suppose Celeste worked for 8 hours each day for 5 consecutive days. Her total pay would be found by finding her total hours ($8 \times 5 = 40$) and then multiplying 40 by her pay per hour (\$9.50). Since you are only multiplying to solve the problem, the expression is $9.50 \times d \times h$ or $9.50dh$.

QUESTION 26

A certain jacket was marked down 20% the first week and another 20% the next week. What percent of the regular price was the final cost of the jacket after the two markdowns?

- A. 30%
- B. 36%
- C. 40%
- D. 60%
- E. 64%

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

To make this problem easier, assume the initial cost of the jacket was \$100. The first markdown of 20% would save you \$20, bringing the cost of the jacket to \$80. For the second markdown, you should be finding 20% of \$80, the new cost of the jacket. $20\% \text{ of } 80 = 0.20 \times 80 = 16$. If you save \$16 the second time, the final cost of the jacket is $80 - 16 = \$64$. Since the initial cost was \$100, \$64 is 64% of this price.

QUESTION 27

If 20 typists can type 48 letters in 20 minutes, then how many letters will 30 typists working at the same rate complete in 1 hour?

- A. 63
- B. 72
- C. 144
- D. 216
- E. 400

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

First calculate the number of letters completed by 30 typists in 20 minutes. Let x = the number of letters typed by 30 typists and set up the proportion $\text{typists/letters} = 20/48 = 30/x$. Cross-multiply to get $20x = 1,440$. Divide both sides by 20 and get $x = 72$. Since 20 minutes is one-third of an hour, multiply $72 \times 3 = 216$ to get the total letters for one hour.

QUESTION 28

What is the final balance of a bank account after two years if the starting balance is \$1,000 at an annual rate of 5%, using simple interest? Assume no other money was withdrawn or deposited.

- A. \$50
- B. \$100
- C. \$1,050
- D. \$1,100
- E. \$1,150

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

This problem can be solved by using the simple interest formula: $\text{interest} = \text{principal} \times \text{rate} \times \text{time}$. Remember to change the interest rate to a decimal before using it in the formula. $I = (1,000) (0.05) (2) = \100 . Since \$100 was made in interest, the total in the bank account is $\$1,000 + \$100 = \$1,100$.

QUESTION 29

Which of the following has the smallest numerical value?

- A. 23×22
- B. 26
- C. 25×21
- D. $(22)^3$
- E. 23×33

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Using the rules for exponents, choice a simplifies to 25 and choices b, c, and d simplify to $26 = 64$. Choice e becomes 27×81 , which is obviously much larger than 64.

QUESTION 30

How many liters of a 40% iodine solution need to be mixed with 35 liters of a 20% iodine solution to create a 35% iodine solution?

- A. 35
- B. 49
- C. 100
- D. 105
- E. 140

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Let x = the number of liters of the 40% solution. Use the equation $0.40x + 0.20(35) = 0.35(x + 35)$ to show the two amounts mixed equal the 35% solution.

Solve the equation: $0.40x + 0.20(35) = 0.35(x + 35)$

Multiply both sides by 100 in order to work with more compatible numbers:

$$40x + 20(35) = 35(x + 35)$$

$$40x + 700 = 35x + 1,225$$

$$\text{Subtract 700 on both sides: } 40x + 700 - 700 = 35x + 1,225 - 700 \quad \text{Subtract 35x from both sides } 40x - 35x = 35x - 35x + 525$$

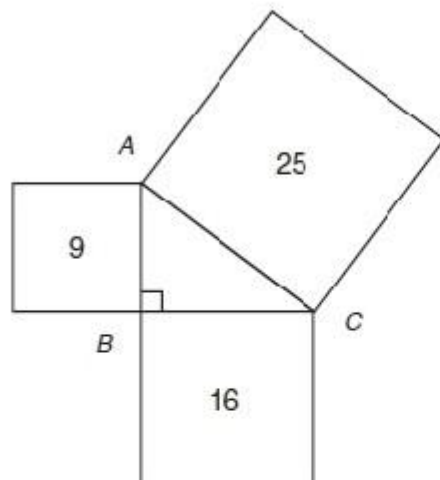
Divide both sides by 5: $5x/5 = 525/5$

$x = 105$ liters of 35% iodine solution

QUESTION 31

Given the area of the three squares, find the perimeter of ABC.

13. Given the area of the three squares, find the perimeter of $\triangle ABC$.



- a. 12
- b. 12.5
- c. 19.5
- d. 20
- e. 25

14. During a sale, the price of a pair of shoes is marked down 10% from the regular price. After the sale ends, the price goes back to the original price. What is the percent of increase to the nearest percent from the sale price back to the regular price for the shoes?

- a. 9%
- b. 10%
- c. 11%
- d. 15%
- e. 90%

- A. 12
- B. 12.5
- C. 19.5
- D. 20
- E. 25

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The length of one side of a square is equal to the square root of the area of the square. Since the area of the squares is 9, 16, and 25, the lengths of the sides of the squares are 3, 4, and 5, respectively. The triangle is formed by the sides of the three squares; therefore, the perimeter, or distance around the triangle, is $3 + 4 + 5 = 12$.

QUESTION 32

During a sale, the price of a pair of shoes is marked down 10% from the regular price. After the sale ends, the price goes back to the original price. What is the percent of increase to the nearest percent from the sale price back to the regular price for the shoes?

- A. 9%
- B. 10%
- C. 11%
- D. 15%
- E. 90%

Correct Answer: C

Section: Problem-Solving Questions

Explanation

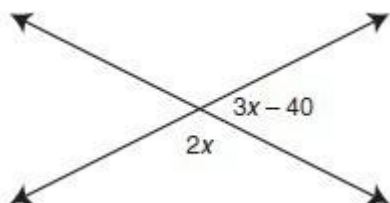
Explanation/Reference:

Explanation:

Suppose that the shoes cost \$10. $\$10 - 10\% = 10 - 1 = \9 . When the shoes are marked back up, 10% of \$9 is only 90 cents. Therefore, the markup must be greater than 10%. $\$1/\$9 = 11 \frac{1}{9}\%$, or about 11%.

QUESTION 33

How many degrees is the smaller angle?



- A. 44
- B. 88
- C. 92
- D. 132
- E. 180

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Note that the figure is not drawn to scale, so do not rely on the diagram to calculate the answer. Since the angles are adjacent and formed by two intersecting lines, they are also supplementary. Combine the two angles and set the sum equal to 180. $2x + 3x - 40 = 180$. Combine like terms and add 40 to both sides. $5x - 40 + 40 = 180 + 40$. $5x = 220$. Divide both sides by 5 to get $x = 44$. Then $2x = 88$ and $3x - 40 = 92$. The smaller angle is 88.

QUESTION 34

If the average (arithmetic mean) of x , $x + 2$, and $x + 4$ is 33, what is the value of x ?

- A. 30
- B. 31
- C. 32
- D. 32
- E. 37

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

x , $x + 2$, and $x + 4$ are each two numbers apart. This would make $x + 2$ the average of the three numbers. If $x + 2 = 33$, then $x = 31$.

QUESTION 35

If it costs d dollars to make the first 100 copies of a poster and e dollars for each poster after that, what is the total cost of 125 posters?

- A. $25d + 100e$
- B. $100d + 25e$
- C. $125de$
- D. $d + 25e$
- E. $125/de$

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

It costs d for the first 100 posters plus the cost of 25 additional posters. This translates to $d + 25e$, since e is the cost of each poster over the initial 100.

QUESTION 36

If the volume of a cube is x^3 cubic units, what is the number of square units in the surface area of the cube?

- A. x^2
- B. x^3
- C. x^6
- D. $6x^2$
- E. $6x^3$

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If the volume of the cube is x^3 , then one edge of the cube is x . The surface area of a cube is six times the area of one face, which is x times x . The total surface area is $6x^2$.

QUESTION 37

If $x - 3$ is a multiple of two, what is the next larger multiple of two?

- A. $2x$
- B. $x - 2$
- C. $x - 1$
- D. $x - 5$
- E. $x + 2$

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The next larger multiple of two would be $x - 3 + 2$, which is $x - 1$. In this case, remember that any even number is a multiple of two and all evens are two numbers apart. If $x - 3$ is a multiple of two, you can assume that it is also an even number. This number plus two would also produce an even number.

QUESTION 38

If $3x + 1 = 81$, then $x - 1 =$

- A. 2
- B. 3
- C. 4
- D. 9
- E. 27

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Solve for x first. Since $3x + 1 = 81$, and 81 is 34, make an easier equation just based on the exponents. This would be $x + 1 = 4$. $x = 3$. Therefore, $x - 1 = 3 - 1 = 2$.

QUESTION 39

For dinner at a restaurant, there are x choices of appetizers, $y + 1$ main courses, and z choices of dessert. How many total possible choices are there if you choose 1 appetizer, 1 main course, and 1 dessert for your meal?

- A. $x + y + z + 1$
- B. $xyz + xz$
- C. $xy + z + 1$
- D. $xyz + 1$
- E. $xyz + 1/2$

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Use the counting principle: Take the number of choices you have for each course and multiply them together to get the total possible combinations. $x \times (y + 1) \times z$. Use the distributive property to simplify to $xyz + xz$.

QUESTION 40

If $x \$ y$ is defined as $2(x + y)^2$, then what is the value of $2 \$ 3$?

- A. 25
- B. 36
- C. 50
- D. 100
- E. 144

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

For this type of problem, substitute the values you are given for x and y . In this case, $x = 2$ and $y = 3$. The expression becomes $2(2 + 3)^2$. Using the order of operations, perform the operation within the parentheses first and then the exponent. $2(5)^2 = 2(25)$. Multiply to get 50.

QUESTION 41

If x , y , and z are real numbers, which is always true?

- I) $x(yz) = (xy)z$
- II) $x/y = y/z$

III) $z(x + y) = zx + zy$

- A. I only
- B. II only
- C. I and II only
- D. I and III only
- E. I, II, and III

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Statement I is an example of the associative property of multiplication and statement III is an example of the distributive property. These properties will hold for any real numbers that are substituted into them. Statement II is not a property of real numbers and may be true for certain numbers, but not for every real number.

QUESTION 42

If $y = 6x$, then $6y$ equals

- A. $6x$
- B. $6x+1$
- C. $6x + 6$
- D. $6x$
- E. $6x - 1$

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Since $y = 6x$, multiplying each side of the equation results in $6y = 6(6x)$. Recall that since $6 = 6^1$, $6x \times 6^1 = 6x + 1$ by the laws of exponents.

QUESTION 43

What is the smallest of six consecutive odd integers whose average (arithmetic mean) is $x + 2$?

- A. $x - 5$
- B. $x - 3$
- C. $x - 1$
- D. x
- E. $x + 1$

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Remember that consecutive odd integers are numbers that are two apart in order, like 11, 13, and 15. The average of six consecutive odd integers will be an even number. If $x + 2$ is the average, then this value will be at the middle of the integers if they are arranged in order. Therefore, the three consecutive odd integers smaller than this are expressed as $x + 1$, $x - 1$, and $x - 3$ in descending order. The smallest odd integer is $x - 3$.

QUESTION 44

: 70

The product of a and b is equal to 11 more than twice the sum of a and b . If $b = 7$, what is the value of $b - a$?

- A. 2
- B. 5
- C. 7
- D. 24
- E. 35

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Write an equation for the question by translating the first sentence. The product of a and b is ab , and 11 more than twice the sum of a and b translates to $2(a + b) + 11$. The equation is $ab = 2(a + b) + 11$. Substitute 7 for b . $7a = 2(a + 7) + 11$. This simplifies to $7a = 2a + 14 + 11$ by the distributive property and then becomes $7a = 2a + 25$. Subtract $2a$ from both sides of the equation and then divide each side by 5; $7a - 2a = 2a - 2a + 25$. $5a = 25$. The value of $b - a = 7 - 5 = 2$.

$$\frac{5a}{5} = \frac{25}{5}$$

QUESTION 45

$\sqrt[3]{x^2 \cdot 12 \cdot 23}$

- A. x
- B. $3x$
- C. x
- D. x^2
- E. x^3

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Working from the inside out, the square root of x^2 is equal to x . Therefore, the cube root of x^3 is also x . Each operation undoes the other. The expression reduces to just x .

QUESTION 46

The instructions state that Cheryl needs $\frac{4}{9}$ square yards of one type of material and $\frac{2}{3}$ square yards of another type of material for a project. She buys exactly that amount. After finishing the project, however, she has $\frac{8}{18}$ square yards left that she did not use. What is the total amount of square yards of material Cheryl used?

- A. $\frac{1}{12}$
- B. $\frac{1}{9}$
- C. $\frac{2}{3}$
- D. $1 \frac{1}{9}$
- E. $2 \frac{1}{9}$

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

To solve the problem, you need to add and then subtract since the amount she has not used is

$$\frac{4}{9}$$

, which reduces to . If you were to add and , and then subtract , you would end up with

$$\frac{8}{18}$$

.

$$\frac{2}{3}$$

QUESTION 47

Which of the following values of x would satisfy the inequality $x > 1$?

I) $x = 1 \frac{1}{2}$ 23

II) $x = 1 - \frac{4}{3}$ 22

III) $x = 1 - \frac{1}{3} 2^{-2}$

A. I only

B. II only

C. II and III only

D. I and III only

E. I, II, and III

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Statement I simplifies to , which is less than 1. Statement II simplifies to , which is greater than

$$\frac{1}{8}$$

1. In statement III, you need to take the reciprocal of the fraction inside the parentheses (because the exponent is negative) and then evaluate using an exponent of 2. This results in $(3)^2 = 9$, which is also greater than 1. Both statements II and III would satisfy the inequality $x > 1$.

QUESTION 48

John is three times as old as Sam. If John will be twice as old as Sam in six years, how old was Sam two years ago?

- A. 2
- B. 4
- C. 6
- D. 8
- E. 16

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Let x = Sam's current age and $3x$ = John's current age. If John will be twice as old as Sam in six years, this sets up the equation $3x + 6 = 2(x + 6)$. Solve this equation for x by using the distributive property on the right side of the equation and then subtracting $2x$ from both sides. $3x + 6 = 2x + 12$. $3x - 2x + 6 = 2x - 2x + 12$. Subtract 6 from both sides. $x + 6 - 6 = 12 - 6$. $x = 6$. Since x is Sam's current age, Sam was four years old two years ago.

QUESTION 49

Given a spinner with four sections of equal size labeled A, B, C, and D, what is the probability of NOT getting an A after spinning the spinner two times?

- A. 9/16
- B. 1/8
- C. 1/4
- D. 1/2
- E. 15/16

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

By spinning the spinner two times, the probability of not getting an A is .

$$\frac{3}{4} \times \frac{3}{4} = \frac{9}{16}$$

QUESTION 50

A case of 12 rolls of paper towels sells for \$9. The cost of one roll sold individually is \$1. What is the percent of savings per roll for the 12-roll package over the cost of 12 rolls purchased individually?

- A. 9%
- B. 11%
- C. 15%
- D. 25%
- E. 90%

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If sold by the case, each individual roll cost \$.75 (.75). To find the percent of savings,

$$\frac{\$9.00}{12} =$$

compare the savings to the cost of a roll sold individually. = 0.25 = 25%.

$$\frac{1.00 - .75}{1.00} = \frac{.25}{1.00}$$

QUESTION 51

How many different committees can be formed from a group of two women and four men if three people are on the committee and at least one member must be a woman?

- A. 6
- B. 8
- C. 10
- D. 12
- E. 16

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If at least one member must be a woman, the committee will have either one woman and two men or two women and one man. Use combinations because the order does not matter.

Choosing one woman and two men: ${}^2C_1 \times {}^4C_2 = 12$.

$$\frac{2}{1} \times$$

Choosing two women and one man: ${}^2C_2 \times {}^4C_1 = 4$.

$$\frac{2 \times 1}{2 \times 1} = \frac{4}{1} = \frac{8}{2} = 4$$

Since both situations would satisfy the requirement that at least one member is a woman, add the combinations.

$12 + 4 = 16$ total committees

QUESTION 52

Susan spent one-third of her money on books and half of the remaining money on clothing. She then spent three-fourths of what she had left on food. She had \$5 left over. How much money did she start with?

- A. \$60
- B. \$80
- C. \$120
- D. \$160
- E. \$180

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Start with the money she had left and work backwards. If she had \$5 left over, and had just spent three-fourths of her money on food, then \$5 must be one-fourth of her money. Before buying food she must have had $5 \times 4 = \$20$. She then spent half of her money on clothes; therefore, \$20 was half of her money, giving her \$40 at this point. She then spent one-third of her money on books and had \$40 left over. If \$40 represents two-thirds of her money, then \$60 must be the amount she began with.

QUESTION 53

A truck travels 20 miles due north, 30 miles due east, and then 20 miles due north. How many miles is the truck from the starting point?

- A. 20.3
- B. 70
- C. 44.7
- D. 50
- E. 120

Correct Answer: D

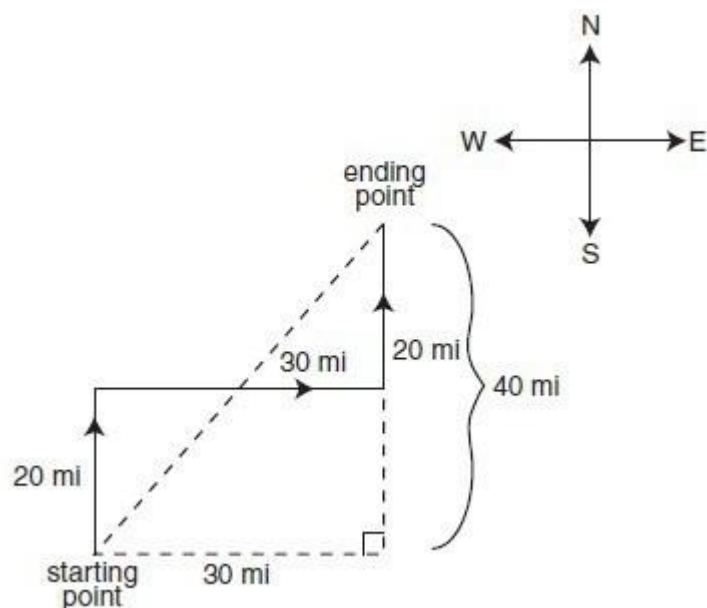
Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Draw a diagram to show the path of the truck.



The distance between the starting point and the final destination is a diagonal line. This line is the hypotenuse of a right triangle that has one leg of 40 and the other measuring 30. Use the Pythagorean theorem: $a^2 + b^2 = c^2$. Recall, however, that this is a multiple of the most common Pythagorean triple

(3, 4, 5)--namely, 30, 40, 50. The distance is 50 miles.

QUESTION 54

$1\frac{1}{2} \times 1\frac{2}{5} =$
.04

- A. .20
- B. .5
- C. 2
- D. 5
- E. 20

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

0.2 divided by 0.04 is the same as 20 divided by 4, which is equal to 5.

$$\frac{1}{2} \times \frac{2}{5} = \frac{1}{5} = .2.$$

QUESTION 55

A rectangular swimming pool is 20 feet by 28 feet. A deck that has uniform width surrounds the pool. The total area of the pool and deck is 884 square feet. What is the width of the deck?

- A. 2 feet
- B. 2.5 feet
- C. 3 feet
- D. 4 feet
- E. 5 feet

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Since we are trying to find the width of the deck, let x = the width of the deck. Therefore, $x + x + 20$ or $2x + 20$ is the width of the entire figure. In the same way, $x + x + 28$ or $2x + 28$ is the length of the entire figure.

The area of a rectangle is length \times width, so use $A = l \times w$.

Substitute into the equation: $884 = (2x + 20)(2x + 28)$

Multiply using FOIL: $884 = 4x^2 + 56x + 40x + 560$

Combine like terms: $884 = 4x^2 + 96x + 560$

Subtract 884 from both sides: $884 - 884 = 4x^2 + 96x + 560 - 884$ $0 = 4x^2 + 96x - 324$

Divide each term by 4: $0 = x^2 + 24x - 81$

Factor the trinomial: $0 = (x + 27)(x - 3)$

Set each factor equal to zero and solve: $x + 27 = 0$ or $x - 3 = 0$ $x = -27$ $x = 3$

Since we are solving for a length, the solution of -27 must be rejected. The width of the deck is 3 feet.

QUESTION 56

If a person randomly guesses on each question of a test with n questions, what is the probability of guessing half of the questions correctly if each question has five possible answer choices?

- A. $5n$
- B. $\frac{1}{5}n$
- C. $\frac{1}{5} \cdot 2n$
- D. $\frac{1}{5} \cdot \frac{2n}{2}$
- E. $\frac{1}{5} \cdot 22n$

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If you are randomly guessing with five possible answer choices, the probability of guessing correct is 1 out of 5, or $\frac{1}{5}$. Since the test has n number of questions and we want to get half of them correct, we

$$\frac{1}{5}$$

want this to happen times. Therefore, the probability would be times itself times, or $\frac{1}{5} \cdot \frac{1}{5} \cdot \dots$

$$\frac{n}{2}$$

QUESTION 57

Two integers are in the ratio of 1 to 4. If 6 is added to the smaller number, the ratio becomes 1 to 2.

Find the larger integer.

- A. 4
- B. 6
- C. 12
- D. 24
- E. 30

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Let x = the smaller integer. The ratio of 1 to 4 can be written as $1x$ to $4x$ or $\frac{1x}{4x}$. Add 6 to the smaller

$$\frac{x}{4x}$$

integer, set the ratio equal to $\frac{1}{2}$, and solve. $\frac{1}{2}$. Cross-multiply to get $2x + 12 = 4x$. Subtract

$$\frac{1}{2}$$

$2x$ from both sides of the equation. $2x + 12 = 4x$ $2x$. $12 = 2x$, so $6 = x$. If the smaller integer is 6, then the larger integer is $6 \times 4 = 24$.

QUESTION 58

The measure of the side of a square is tripled. If x represents the perimeter of the original square, what is the value of the new perimeter?

- A. $3x$
- B. $4x$
- C. $9x$
- D. $12x$
- E. $27x$

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Since x represents the perimeter of the original square, $3x$ represents the perimeter of the new square. If each side is tripled, the perimeter also triples.

QUESTION 59

An investment yields an interest payment of \$68 each week. If the simple annual interest rate is 7.5%, what is the amount of the investment assuming there only 48 weeks are calculated in a year?

- A. \$28,600
- B. \$30,430
- C. \$34,330
- D. \$37,860
- E. \$43,520

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Principal \times percent interest = interest earned

Principle $\times (0.075) \times 1/(12 \times 4) = \68 . Solve to find the principal $(68 \times 12 \times 4)/0.075 = \$43,520$.

QUESTION 60

The flying acrobatic team is made up of 120 airplanes. The team wants to form a rectangular formation with X planes in a row and Y planes in a column. If the number of airplanes in a row is no less than 4 and no more than 30, how many different combinations of rectangular shapes are possible?

- A. 4.
- B. 5.
- C. 6.
- D. 8.
- E. 10.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Use the factors of 120 are: 1x120, 2x60, 3x40, 10x12, 4x30, 5x24, 6x20 and 8x15. We are looking for combinations of (row x column) that are all between 8 and 30. The possibilities are: 8x15, 15x8, 4x30, 30x4, 5x24, 24x5, 6x20, 20x6, 10x12 and 12x10. That is 10 possibilities total.

QUESTION 61

A storeowner estimates that the average price of type A products will increase by 25% next year and that the price of type B products will increase by 10% next year. This year, the total amount paid for type A products was \$4500 and the total price paid for type B products was \$8300. According to the store owner's estimate, and assuming the number of products purchased next year remains the same as that of this year, how much will be spent for both products next year?

- A. \$14,755
- B. \$15,325
- C. \$16,000
- D. \$16,225
- E. \$17,155

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The total estimated amount that will be spent on type A product next year:

$$\$4500 \times \frac{125}{100} = \$5625$$

The total estimated amount that will be spent on type B product next year:

$$\$8300 \times \frac{110}{100} = \$9130$$

Giving a total spending of \$14,755.

QUESTION 62

If a cube has a volume of 64 cubic feet, what is its lateral area?

- A. 16
- B. 24
- C. 48

D. 64

E. 96

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The side of a cube equals the cubic root of its volume; in this question it is 4. The lateral area of a cube equals the sum of four faces; in this question each face is 16, and the lateral area is four times that, giving 64

QUESTION 63

A seven-digit combination lock on a safe has zero exactly three times, does not have the digit 1 at all. What is the probability that exactly 3 of its digits are odd?

A.

B.

C.

D.

E.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Since three digits are zero, only 4 digits are left for consideration (of which, none is zero). Since 1 does not appear in the numbers, there are 4 even numbers (without 0), and 4 odd numbers (without 1) to choose from. The probability for every digit to be odd is $\frac{1}{2}$. There are 4 different ways to arrange 3

$$\frac{1}{2}$$

odd numbers and one even number in 4 places. Each of these ways has a probability of $(\frac{1}{2})^4$. And

$$\frac{1}{2}$$

together:

$$4 \times \left(\frac{1}{4}\right) = 1$$

$$\frac{1}{2}$$

QUESTION 64

Pipe A fills a swimming pool in 4 hours. Pipe B empties the pool in 6 hours. If pipe A was opened at 8:00 am and Pipe B at 9:00 am, at what time will the pool be full?

- A. 15:00
- B. 17:00
- C. 18:00
- D. 19:00
- E. 20:00

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

From 8:00 am to 9:00 am, Pipe A, which fills the pool in 4 hours, was open for one hour, filling one quarter of the pool. From 9:00 am, the two Pipes worked together at the rate of: , one

$$\frac{1}{4} - \frac{1}{6} = \frac{1}{12}$$

pool in 12 hours. Since the pool was already one quarter full at 9:00 am, it will take only 9 hours to fill the remaining three quarters of the pool. 9 hours from 9:00 am is 18:00.

QUESTION 65

In a school with 5 classes, each class has 2 students less than the previous class. How many students are there in the largest class if the total number of students at school is 95?

- A. 17
- B. 19
- C. 21
- D. 23
- E. 25

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If X is the number of students in the largest class, then the numbers of students in the other classes are:

X-2, X-4, X-6 and X-8. The total number of students is:

$X + (X-2) + (X-4) + (X-6) + (X-8) = 95$ and $5X - 20 = 95$ $5X = 115$ $X = 23$

⇒

QUESTION 66

A cylindrical ice cream container is half filled with ice cream. A second ice cream container, half the size of the first one is filled to three quarters of its volume with ice cream. What fraction of the total volume of the two containers is filled with ice cream?

- A.
- B.
- C.
- D.
- E.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Take 40 liters as the volume of the large container to ease the calculations. Of this volume, 20 liters are ice cream. The volume of the second is 20 liters and 15 liters are ice cream. So, the total volume of both containers is $40 + 20 = 60$, and the ice cream is $20 + 15 = 35$. Now, = .

$\frac{35}{60}$

QUESTION 67

A 48 gallon solution of salt and water is 10% salt. How many gallons of water must be added to the solution in order to decrease the salt to 8% of the volume?

- A. 8

- B. 12
- C. 13
- D. 14
- E. 16

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Solve a combined average problem:

$$\frac{48 \times 10\% + X \times 0\%}{(48 + X)} = 8\%$$

QUESTION 68

Five years ago, the average age of the X students in the class was n. What is their average age now, if Y more students whose average age was also n five years ago, joined the class?

- A.
- B.
- C.
- D.
- E. None of the above

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The average age of both groups, x and y was n five years ago. Therefore, it is possible to treat them as one group with that average. Five years later, each student added 5 years to his age, adding 5 to the average of the whole class, and making it n+5.

QUESTION 69

The "Racing magic" takes 120 seconds to circle the racing track once. The "Charging bull" makes 40 rounds of the track in an hour. If they left the starting point together, how many minutes will it take for them to meet at the starting point for the second time?

- A. 3
- B. 6
- C. 9
- D. 12
- E. 15

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The rate of the "racing magic" is 40 rounds per hour, or 1 round every 1.5 minutes. The rate of the "Charging bull" is 1 round every 120 seconds, or 1 round every 2 minutes. The best way to solve such a question is to find the least common denominator between the two rates. At that point, they will meet for the first time, and when multiplied by 2, we find the second time they meet: $\frac{1}{2}$. They will meet for the first time after 6 minutes and for the second time

$$\frac{1}{2}$$

after 12 minutes.

QUESTION 70

A restaurant spends one quarter of its monthly budget for rent and half of the rest for food and beverages. What percentage of the budget does the restaurant spend for food and beverages?

- A. 23.5%
- B. 32.5%
- C. 35%
- D. 37.5%
- E. 75%

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

After spending one quarter of the budget on rent, 75% is left, of that half = 37.5% is spent for food and beverages.

QUESTION 71

If x oranges cost as much as y peaches do, and peaches cost 24 cents each, how many dollars does each orange cost?

- A.
- B.
- C.
- D.
- E.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Compare x oranges to y peaches at the price of 24 cents per peach. Divide by 100 to receive the amount in dollar:

$$x \times \text{Oranges} = y \times \text{Peaches} \Rightarrow x \times 0 = \frac{24y}{100} \Rightarrow 0 \frac{24y}{100x}$$

QUESTION 72

The sum of the volumes of three spheres, each with radius r , equals to the volume of a single sphere with radius R . What is the ratio between r and R ?

- A. 1:
- B. 1:
- C. 1:2
- D. 1:
- E. 1:3

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Compare the volumes:

$$3 \times \frac{4}{3} \pi r^3 = \frac{4}{3} \pi R^3 \Rightarrow 3 \times r^3 = R^3 \Rightarrow \frac{1}{R} = \frac{1}{\sqrt[3]{3}}$$

QUESTION 73

A car travels a distance of 160 miles in 2 hours and 40 minutes, what is the speed of the car in miles per hour?

- A. 54
- B. 60
- C. 84
- D. 116
- E. 120

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The car travels 160 miles in 160 minutes that is 1 mile per minute. So, it travels 60 miles in 60 minutes, or 60 miles per hour.

QUESTION 74

If $\frac{1}{16} = \frac{1}{2^x}$, what is x?

$$\frac{1}{16} = \frac{1}{2^x}$$

- A. 9
- B. 8
- C. 7
- D. 6
- E. 5

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

. And x=5

$$16^{X+7} = 2^{6X+18} \Rightarrow 2^{4(X+7)} = 2^{6X+18} \Rightarrow 4(X+7) = 6X+18$$

QUESTION 75

In the following sequence: [x, y, z, 5, 7, 16, 28] each number is equal to the sum of the three numbers preceding it. What is x+y?

- A. -5
- B. -1
- C. 1
- D. 5
- E. 6

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

First find z: $z+5+7=16$, therefore, $z=4$. Now, $y+4+5=7$ making $y=(-2)$. Now we can find x: $x+(-2)+4=5$, so, $x=3$. Hence, $x+y=3+(-2)=1$.

QUESTION 76

John has \$1,600 at the beginning of his trip, after spending money, he still has exactly \$800 less than he spent on the trip. How much money does John still have?

- A. \$200
- B. \$400
- C. \$600
- D. \$800
- E. \$1,200

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

John spends a sum of m dollars and still has m-800 left. So, $m+m-800=1,600$, and $m=\$1,200$. Therefore, John still has $\$1,600-\$1,200=\$400$.

QUESTION 77

The odds of winning first prize at the casino are 1 to 200. The odds of winning second prize are 1 to 100 and of winning third prize are 1 to 50. If no one person can win more than one of the prizes, what is the probability of not winning the first, second or third prize?

- A.
- B.
- C.
- D.
- E.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Calculate the odds of not winning first, second or third prize by deducting the chances of winning first, second or third from 1:

$$1 - \left(\frac{1}{200} + \frac{1}{100} + \frac{1}{50} \right) = \frac{193}{200}$$

QUESTION 78

A cube has three of its faces painted half red, half white. The other three faces are completely painted white. What is the ratio between the total red painted and the total white painted areas of the cube?

- A. 1:6
- B. 3:6
- C. 1:2
- D. 1:4.5
- E. 1:3

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The red painted area is 3 half faces and the white painted area is a total of 9 half faces. The ratio is, therefore, 1 to 3.

QUESTION 79

One out of every 500 light bulbs are defected. If 2 out of every 10 defected light bulbs have a broken glass and there are 20 broken glass light bulbs in the shipment, how many light bulbs total are there in the shipment?

- A. 2,000
- B. 5,000
- C. 10,000
- D. 50,000
- E. 52,000

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Two out of every 10 damaged light bulbs have a broken glass, so if 20 bulbs have a broken glass, there are 100 damaged light bulbs. Since one out of every 500 is damaged, there are light bulbs in the shipment.

$$100 \times 500 = 50,000$$

QUESTION 80

If a is an even integer and b is an odd integer, what must the expression be?

$$\frac{a^2 b^2}{8}$$

- A. Always even
- B. Always odd
- C. Always a fraction
- D. Could be a fraction
- E. Always an integer

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Since the even number a is raised to the power of 3, it is always divisible by 8. Therefore, the whole expression must be an integer, an even or an odd one. Of course, the expression cannot be a fraction.

QUESTION 81

A salesperson gets a 15% commission on each sale he makes. How many sales of \$270 each must he make in order to reach a salary of at least \$1000?

- A. 15
- B. 24
- C. 25
- D. 26
- E. 52

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The commission per sale is \$40.5, multiply it by 25 sales and get to \$1012.5.

QUESTION 82

In how many different ways can five people be seated on a five-seat bench if two of them must sit next to each other?

- A. 24
- B. 48
- C. 120
- D. 240
- E. 480

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Treat the two that seat together as one person, now there are only 4 people to be seated in 4 places. This task has $4!$ Ways=24. Remember that the two people sitting together can switch places on any of the 24 different ways, so we have 48 ways total.

QUESTION 83

The area of an isosceles trapezoid with sides of length 5 and bases of length 8 and 14 is?

- A. 22
- B. 32
- C. 44
- D. 55
- E. 56

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The height of the trapezoid can be calculated using a right angle triangle of 3,4 and 5 created with the height, the side and half of the difference between the two bases. When finding the height of 4, the area

is calculated as the product of the average of the bases and the height:

$$\left(\frac{8+14}{2}\right) \times 4 = 44$$

QUESTION 84

One gallon of soft drink is made of 40% orange juice and 60% water, how many additional gallons of orange juice must be mixed in to make the orange juice 60% of the soft drink?

- A. 0.5
- B. 1
- C. 1.25
- D. 1.5
- E. 2

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Use the average formula to solve the following equation:

. $X=0.5$ gallon.

$$\frac{1 \times 40\% + X \times 100\%}{1 + X} = 60\%$$

QUESTION 85

A merchant gets a 5% discount on each meter of fabric he buys after the first 2,000 meters and a 7% discount on every meter after the next 1,500 meters. The price, before discount, of one meter of fabric is \$2, what is the total amount of money the merchant spends on 4,500 meters of fabric?

- A. \$8,617
- B. \$8,710
- C. \$8,810
- D. \$8,835
- E. \$8,915

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The price of the first 2,000 meters of fabric is $\$2 = \$4,000$. The price of the next 1,500 meters is 95% of $\$2 = \$1.9 = \$2,850$. The price of the last 1,000 meters is 93% of $\$2 = \$1.86 = \$1,860$. The total amount spent is: $\$4,000 + \$2,850 + \$1,860 = \$8,710$.

QUESTION 86

On a summer camp, 25% of the campers paid \$120 each, 35% paid \$80 each and the rest paid \$65 each. What percentage of the total amount paid came from the campers who paid \$80?

- A. 18%
- B. 21%
- C. 26%
- D. 33.3%
- E. 37.5%

Correct Answer: D

Section: Problem-Solving Questions**Explanation****Explanation/Reference:**

Explanation:

Take 100 campers as an example to work with, 25 paid \$120 = \$3,000 total, 35 paid \$80 = \$2,800 total, and 40 (the rest) paid \$65 = \$2,600. The total amount paid is \$8,400. The amount paid by the campers

who paid \$65 is .

$$\frac{\$2,800}{\$8,400} = \frac{1}{3} = 33.3\%$$

QUESTION 87

A snail, climbing a 20 feet high wall, climbs up 4 feet on the first day but slides down 2 feet on the second. It climbs 4 feet on the third day and slides down again 2 feet on the fourth day. If this pattern continues, how many days will it take the snail to reach the top of the wall?

- A. 12
- B. 16
- C. 17
- D. 20
- E. 21

Correct Answer: C

Section: Problem-Solving Questions**Explanation****Explanation/Reference:**

Explanation:

The snail climbs 2 feet every 2 days, hence, on the 16th day he is 16 feet up the wall. The snail needs only the 17th day to climb 4 feet more and reach the top of the wall.

QUESTION 88

John spent a total of \$135 on baseball tickets. The price of a ticket is either \$12 for the field seats or \$5 for the balcony. What is the minimum amount of dollars he could have spent for the \$12 tickets?

- A. \$48
- B. \$60
- C. \$84

- D. \$96
- E. \$120

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Since John spent all of the \$135 on the tickets, their prices must sum up to \$135. The Minimum amount spent for the \$12 tickets, is the smallest amount that is divisible by 12, and still leaves an amount divisible by 5. \$60 is the smallest amount both divisible by 12 and leaving $\$135 - \$60 = \$75$, which is divisible by \$5.

QUESTION 89

One of the solutions of the equation $X^2 - X - k = 5$, is 3. What is the other solution of the equation?

- A. 4
- B. -4
- C. 5
- D. 6
- E. 24

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

First, plug in the solution 3 to find the value of k: $(-3)^2 - (-3) - k - 5 = 0, k = 7$. Then solve: $X^2 - X - 7 - 5 = 0$ to find the second solution: $X = 4$.

QUESTION 90

What is the sum of all even integers between 30 and 50, inclusive?

- A. 640
- B. 540
- C. 480
- D. 440
- E. 240

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The sum of the even integers between 30 and 50 inclusive can be calculated using the product of the number of integers by their average. The average of a fixed-difference sequence of numbers can be

calculated as the average of the largest and the smallest numbers: . We remember

$$\frac{30 + 50}{2} = 40$$

that between 30 and 49, inclusive, there are 20 numbers of which half are even and half odd. Add 1 (the number 50) to the 10 even numbers to receive a total of 11 even integers, multiply it by the average to get the sum: .

$$40 \times 11 = 440$$

QUESTION 91

The price (p) of product X depends on the yearly number of units produced (n) according to the

following formula: $p = \frac{500 - n}{10}$. What will the estimated price per unit be next year if an estimated

$$\frac{500 - n}{10}$$

number of 260 units will be sold?

- A. 24
- B. 26
- C. 50
- D. 60
- E. 240

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Plug the number of units into the given formula to find the price per unit:

$$p = \frac{500 - 260}{10} \cdot P = 24$$

QUESTION 92

John must arrange 3 different physics books and 3 different mathematics books on one shelf. If the first book on the leftmost side is a mathematics book and no physics book is next to another physics book. How many different arrangements exist?

- A. 6
- B. 9
- C. 36
- D. 120
- E. 720

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The leftmost book is a mathematics book; the next is physics and so on. So, the odd places books are the mathematics books and the even placed books are the physics books. The mission is therefore, arranging three mathematics books in three places ($3! = 6$ arrangements) and three physics books in three places ($3! = 6$ arrangements). The total number of different arrangements is the product of the two missions: .

$$3! \times 3! = 6 \times 6 = 36$$

QUESTION 93

An investor receives a total combined return of 7% on his two different investments. On his \$10,000 investment he receives a return of 6%. What is the return on his \$20,000 investment?

- A. 7.25%
- B. 7.5%
- C. 8%
- D. 8.5%

E. 9%

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The combined return is 7% of \$30,000 = \$2,100. Subtract the 6% return on his \$10,000 investment = \$600. \$2,100-\$600=\$1,500. This is the return on his second investment of \$20,000. \$1,500 of \$20,000 is a 7.5% return.

QUESTION 94

What is the probability of getting an identical result on three consecutive tosses of a coin?

- A.
- B.
- C.
- D.
- E.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The first toss will be either heads or tails. The probability that the result on the second toss is identical to the first is $\frac{1}{2}$. The probability that the result on the third toss is identical to that of the second is also $\frac{1}{2}$.

$$\frac{1}{2}$$

. The total probability is, therefore, $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$.

$$\frac{1}{2}$$

QUESTION 95

A salesperson receives a base salary of \$1000 per month and a commission of 7.5% of the selling price of each item sold above the first 50 item. If this

month she sold 210 items for \$150 each, what will her monthly salary be?

- A. \$1,500
- B. \$1,800
- C. \$2,100
- D. \$2,500
- E. \$2,800

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The salesperson receives a commission on $210 - 50 = 160$ sales. The commission on every sale is 7.5% of \$150 = \$11.25. .

$$160 \times 11.25 = \$1,800$$

QUESTION 96

What is the probability that the sum of the results when two dice are rolled simultaneously will be 9?

- A.
- B.
- C.
- D.
- E.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

When two dice are rolled together, there are 4 different possibilities to receive a sum of 9: [3,6], [4,5], [5,4], [6,3], out of a total of 36 different possibilities.

$$\frac{4}{36} = \frac{1}{9}$$

QUESTION 97

What is the units' digit of the following expression $(13)^5 (15)^4 (17)^5$?

- A. 0
- B. 1
- C. 3
- D. 5
- E. 9

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

When multiplying any number by a number with a units' digit of 5, the units' digit of the product will be either 5 (when all numbers are odd) or 0 (when there is at least one even number). Since in this question there are no even numbers, the units' digit is 5.

QUESTION 98

What is the number of different ways to choose a chairman, two deputies and two assistants for the class committee out of 7 students up for election?

- A. 25
- B. 210
- C. 630
- D. 840
- E. 2520

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

There are 7 different choices for chairman, choices for the two

$$\binom{6}{2} = \frac{6!}{2! \times 4!} = \frac{6 \times 5}{2 \times 1} = 15$$

deputies (choosing 2 out of 6), and choices for the two assistants.

$$\binom{4}{2} = \frac{4!}{2! \times 2!} = \frac{4 \times 3}{2 \times 1} = 6$$

The total is choices.

$$7 \times 15 \times 6 = 630$$

QUESTION 99

A factory has a fixed cost of \$45,000 a month, and a cost of \$2.5 for every item produced. If the selling price of a single item is \$5, what is the number of items must be sold monthly for the factory to cover its cost exactly?

- A. 9,000
- B. 14,000
- C. 18,000
- D. 22,500
- E. 27,000

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

To find the number of items sold that makes the revenues equal to the cost, solve the following equation: .

$$\$45,000 + \$2.5 \times X = \$5 \times X, \quad X = 18,000$$

QUESTION 100

John traveled 80% of the way from Yellow-town to Green-fields by train at an average speed of 80 miles per hour. The rest of the way John traveled by car at an average speed of v miles per hour. If the average speed for the entire trip was 60 miles per hour, what is v in miles per hour?

- A. 30
- B. 40
- C. 50
- D. 55
- E. 70

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Take 100 miles as the total mileage traveled, then calculate the total distance divided by the total time to receive the average speed for the whole trip:
. And $v=30$ miles per hour.

$$\frac{100}{\frac{80}{80} + \frac{20}{y}} = 60$$

QUESTION 101

The ratio between the number of sheep and the number of horses at the Stewart farm is 4 to 7, If each horse is fed 230 ounces of horse food per day and the farm needs a total 12,880 ounces of horse food per day, what is the number of sheep in the farm?

- A. 18
- B. 28
- C. 32
- D. 56
- E. 60

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The number of horses can be calculated using the total weight of daily horse food divided by the weight each horse is fed daily: . There are 56 horses at the farm. Since the ratio is 4 to 7,

$$\frac{12,880}{230} = 56$$

between the sheep and horses, the number of sheep is: . There are 32

$$\frac{56}{7} = 8 \Rightarrow 8 \times 4 = 32$$

sheep.

QUESTION 102

The volume of water inside a swimming pool doubles every hour. If the pool is filled to its full capacity within 8 hours, in how many hours was it filled to one quarter of its capacity?

- A. 2
- B. 4
- C. 5
- D. 6
- E. 7

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Solve this question backwards. If the pool was full on the 8th hour, it was half filled on the 7th and one quarter filled on the 6th.

QUESTION 103

Two carpenters, working in the same pace, can build 2 desks in two hours and a half. How many desks can 4 carpenters build in 4 hours?

- A. 2.4.
- B. 3.6.
- C. 4.2.
- D. 5.5.
- E. 6.4

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

2 carpenters build 2 desks in 2.5 hours ---> 4 carpenters build 4 desks in 2.5 hours ----> In 4 hours there are $(4/2.5 = 1.6)$ time units. And (4×1.6) is 6.4 desks.

QUESTION 104

6. There are 40 students in a classroom, $\frac{9}{20}$ of them are boys and $\frac{4}{5}$ of them are right-handed. How many right-handed boys are there in the classroom?

- A. Between 10 and 32.
- B. Between 14 and 32.
- C. Between 10 and 18.
- D. Between 14 and 18.
- E. Between 18 and 36.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

There are $(\frac{9}{20} \times 40 = 18)$ boys in the class. 80% of them are right-handed, meaning that $(\frac{4}{5} \times 18 = 14.4)$. Answer C is the best answer.

QUESTION 105

In Jonathan's pen there are 300 sheep's. $\frac{5}{6}$ of the sheep's are white, $\frac{2}{3}$ of the sheep's have soft wool. What can't be the number of white sheep's that also have soft wool in the pen?

- A. 100.
- B. 200.
- C. 190.
- D. 180.
- E. 160.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

There are $(\frac{5}{6} \times 300 = 250)$ white sheep's.

There are $(\frac{2}{3} \times 300 = 200)$ soft woolen sheep's.

The maximum overlap is the size of the smallest among the groups, thus 200. The minimum overlap is $(250 + 200 - 300 = 150)$.

Therefore the number of sheep's can be somewhere between 150 and 200.

QUESTION 106

Ross has 40 shirts, $\frac{3}{4}$ of the shirts are green and $\frac{1}{10}$ is without buttons. Therefore Ross has between ____ and ____ shirts with buttons that are not green.

- A. 6 ; 10.
- B. 4 ; 25.
- C. 4 ; 10.
- D. 5 ; 25.
- E. 3 ; 10.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Notice that the groups that we are looking for a overlapping are the not-green shirts and the buttoned ones. The not-green shirts are a quarter of 40, 10 shirts.

The shirts with buttons are $(\frac{9}{10} \times 40 = 36)$.

The maximum overlapping is the size of the smallest group: 10.

The minimum overlapping is: $36 + 10 - 40 = 6$.

Therefore A is the answer.

QUESTION 107

In the Kan film festival, 50 movies were presented. $\frac{3}{5}$ of the movies are action movies and $\frac{4}{5}$ is science fiction movies. How many of the movies were science fiction action movies?

- A. 10.
- B. 15.
- C. 20.
- D. 30.
- E. 35.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

There were $(\frac{3}{5} \times 50 = 30)$ action movies.

There were $(\frac{4}{5} \times 50 = 40)$ science fiction movies.

Exact overlapping is calculated by minimum overlapping method. Therefore there are $(40 + 30 - 50 = 20)$ movies that belong to both categories.

QUESTION 108

There are 200 cats in Cat-City. Out of the 200, 70 are street cats and the rest are domestic cats. 110 cats are gray, 30 out of the gray cats are domestic ones. How many domestic cats are there which are not gray in Cat-City?

- A. 90.
- B. 80.
- C. 50.
- D. 40.
- E. 25.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Out of 200 cats, 130 are domestic ones. Out of 110 gray cats, 30 are street cats therefore 80 are grey and domestic ones. Altogether there are 130 domestic cats, 80 are grey so $(130 - 80) = 50$ are not grey.

QUESTION 109

Chandler is building a fence in the following method: He grounds 10 poles, each 10 Cm thick, in 1 meter spaces from each other. He then connects the poles with a barbed wire. What is the total length of the fence?

- A. 11.
- B. 12.
- C. 9.9.
- D. 10.
- E. 13.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The total width of the poles is $(10 \times 0.1 = 1)$ meter.

There are 9 spaces between the poles, each 1 meter, so it's another 9 meters.
The total length is $(1 + 9 = 10)$ meters.

QUESTION 110

What is the sum of all the even numbers bigger than (-10) and smaller than 12?

- A. 2.
- B. 10.
- C. 0.
- D. 8.
- E. 4.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

This is a series of numbers with a constant spacing between them. The first number is (-8) and the last is (10) , there are 10 numbers altogether. The formula for such a series is: $((-8 + 10) \times 10)/2 = 10$. The second way to answer such a question is to write the numbers and add them.

QUESTION 111

The value of an "Aerosoul" stock changes according to the following method:

At the end of each month her value is doubled but due to commission the stock's value is decreases by \$10. If the value at the beginning of January is \$A, what would be her value at the end of February?

- A. 4A 10.
- B. 4A 20.
- C. 4A 30.
- D. 4A 40.
- E. 4A 50.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

At the end of January her value is 2A 10.

At the end of February her value is $(2 \times (2A - 10) - 10 = 4A - 30)$.

QUESTION 112

An Ameba is an organic life form that divides into two Amebas each round hour. If at a certain round hour, two Amebas were placed in a jar, how many Amebas will be in the jar in N hours?

- A. $2N$
- B. $22N$
- C. $2N+1$
- D. $2N-1$
- E. $2N$

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Let's find the number of Amebas in the first hours.

After one hour ($N=1$) there will be 4 Amebas.

After two hours ($N=2$) there will be 8 Amebas.

After three hours ($N=3$) there will be 16 amebas.

Therefore the formula that fits this series is $2N+1$.

QUESTION 113

Alfa, Beta and Gamma are inner angles in a triangle. If $\text{Alfa} = \text{Beta} + \text{Gamma}$, what can't be the size of Beta?

- A. 44 degrees.
- B. 45 degrees.
- C. 89 degrees.
- D. 90 degrees.
- E. There isn't enough data to determine.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If Beta is 90 degrees then Alfa is bigger than 90 and the sum of the angles in the triangle will be bigger than 180 degrees.

QUESTION 114

In a triangle, one side is 6 Cm and another side is 9 Cm. which of the following can be the perimeter of the triangle?

- A. 18.
- B. 25.
- C. 30.
- D. 32.
- E. 34.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The third side of the triangle is larger than 3 (The difference between the other two) and smaller than 15 (The sum of the other two). The perimeter is between $(6+9+3 = 18)$ and $(6+9+15 = 30)$. The only answer that is in this range is B.

QUESTION 115

To which of the following shapes the area can't be calculated if the perimeter is given?

- A. Circle.
- B. An isosceles right triangle.
- C. Rectangle.
- D. A regular Hexagon.
- E. Square.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The perimeter of a rectangle is $2a + 2b$. In order to calculate the area we need to know the multiplication of $a \times b$.

QUESTION 116

A and B are two circles. The radius of A is twice as large as the diameter of B. What is the ratio between the areas of the circles?

- A. 1:8.
- B. 1:2.
- C. 1:4.
- D. 1:16.
- E. 1:6.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The radius of circle A is 4 times larger than the radius of circle B. The area of a circle is a function of the radius squared, therefore the area of radius A is 16 times bigger.

QUESTION 117

A, B, C, D and E are 5 consecutive points on a straight line. If $BC = 2CD$, $DE = 4$, $AB = 5$ and $AC = 11$, what is the length of AE?

- A. 21.
- B. 26.
- C. 30.
- D. 18.
- E. 16.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

First, draw the line and the points.

In order to find the length of AE, find the length of CD and BC first.

$$BC = AC - AB = 11 - 5 = 6.$$

$$BC = 2CD \quad CD = 3.$$

$$AE = 5 + 6 + 3 + 4 = 18.$$

QUESTION 118

In a rectangular axis system, what is the distance between the following points: A(3,2) and B(7,5) ?

- A. 5.
- B. 7.
- C. 6.
- D. 4.
- E. 3.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

First, draw a rectangular axis system and mark the two points. The easiest way to find the distance between them is to draw a triangle, where the line AB is the hypotenuse. You can see that the length of one side of the triangle is $(5-2=3)$ and the other side is $(7-3=4)$. The length of the line AB is received with the help Of the Pythagoras principle: $= 5$.

QUESTION 119

In a rectangular axis system, what is approximate distance between the following points: C(1,2.5) and D(6.5,5.5) ?

- A. 5.5.
- B. 7.2.
- C. 6.3.
- D. 4.1.
- E. 3.8.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

First, draw a rectangular axis system and mark the two points. The easiest way to find the distance between them is to draw a triangle, where the line CD is the hypotenuse. You can see that the length of one side of the triangle is $(5.5 - 2.5 = 3)$ and the other side is $(6.5 - 1 = 5.5)$. The length of the line CD is received with the help Of the Pythagoras principle: .

QUESTION 120

In a rectangular axis system, what is the distance between the following points: A(24.4,30) and B(34.4,42.49) ?

- A. 5.
- B. 7.
- C. 8.
- D. 12.
- E. 16.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

First, draw a rectangular axis system and mark the two points. The easiest way to find the distance between them is to draw a triangle, where the line AB is the hypotenuse. You can see that the length of one side of the triangle is $(34.4 - 24.4 = 10)$ and the other side is $(42.49 - 30 = 12.49)$. The length of the line AB is received with the help Of the Pythagoras principle: .

QUESTION 121

In a rectangular axis system, what is the area of a parallelogram with the coordinates: (5,7), (12,7), (2,3), (9,3) ?

- A. 21.
- B. 28.
- C. 35.
- D. 49.
- E. 52.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

First, draw the axis system and mark the 4 points. Connect the points to get a parallelogram. The area is calculated by the multiplication of one on of the bases and the height. The height is $(7 - 3 = 4)$, the length of the base is $(9 - 2 = 7)$. The area is $4 \times 7 = 28$.

QUESTION 122

If the radius of a cylinder is doubled and so is the height, what is the new volume of the cylinder divided by the old one?

- A. 8.

- B. 2.
- C. 6.
- D. 4.
- E. 10.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The volume of a cylinder is $(\pi \times R^2) \times (\text{height of cylinder})$.

The new volume is $(4 \times 2 = 8)$ bigger.

QUESTION 123

If the radius of a cylinder is doubled and so is the height, how much bigger is the new lateral surface area (with out the bases)?

- A. 8.
- B. 2.
- C. 6.
- D. 4.
- E. 10.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The lateral surface area of a cylinder is $(2 \times \pi \times R) \times (\text{height of cylinder})$. The new lateral surface area is $(2 \times \pi \times 2R) \times (\text{double the height}) = 4$ times bigger.

QUESTION 124

1. If $X \sim Y = X^2 + XY$, then what is the value of $-1 \sim 2$?

- A. 1.
- B. -1.
- C. 3.
- D. 4.

E. 2.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$$-1 \sim 2 = (-1)^2 + (-1)^2 = -1.$$

QUESTION 125

If $Y = XY^?X^2$, then what is the value of $(t-1)^{??3}$

A. $3t^2 - 2t + 2$.

B. $3t^2 - 2t + 4$.

C. $3t^2 - 6t + 3$.

D. $3t^2 - 6t - 3$.

E. $3t^2 - 6 + 3$.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$$3(t-1)^2 = 3(t-1)^2 = 3(t^2 - 2t + 1) = 3t^2 - 6t + 3.$$

QUESTION 126

If $Q^? = Q + 2$, then what is the value of $(3^?)^{??}$

A. 7.

B. 5.

C. 6.

D. 4.

E. 8.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$$(3r) ? = (3 + 2) ? = 5 ? = 5 + 2 = 7.$$

QUESTION 127

If $(3?) ? = 9$, then which of the following expressions can x be equal to?

- A. x^2 .
- B. $3x - 5$.
- C. $2x - 1$.
- D. $2x + 1$.
- E. none of the answers above.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Check the answers by replacing the x with 3 and try to see if it works out.

Answer (a): $(3?) ? = (3^2)^2 = 81$. Not good.

Answer (b): $(3?) ? = (3 \times 3 - 5) ? = (4) ? = (12 - 5) = 7$. Not good either. Answer (c): $(3?) ? = (3 \times 2 - 1) ? = (5) ? = (10 - 1) = 9$. Good enough.

QUESTION 128

If $?(a, b) = ?$, what is the value of $?(?(4, 4), ?(1, 9))$?

- A. 1.
- B. 4.
- C. 6.
- D. 9.
- E. 18.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Start with the inner parenthesis.

? (4,4) = .

? (1,9) = .

? (6,1) = . Therefore E is the best answer.

QUESTION 129

If $5? = 13$, which of the following can describe a ??

A. $3a + 1$.

B. $2a + 3$.

C. $3a - 2$.

D. $3a - 1$.

E. Answers B. and (c).

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Check each and every answer:

A. $5? = 3 \times 5 + 1 = 16$.

B. $5? = 2 \times 5 + 3 = 13$.

C. $5? = 3 \times 5 - 2 = 13$.

There is no need to check the final answer because we already know the right answer.

QUESTION 130

If $(1 < A < 3 < B)$, then which of the following expressions is the largest?

A. $(B+2)/(A-1)$.

B. $(B-2)/(A+1)$.

C. A/B .

D. $(B-2)/(A-1)$.

E. B/A .

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Try some numbers and check the answers. $A=2$, $B=4$.

A. $6/1 = 6$.

B. $2/3$.

C. $1/2$.

D. 2.

E. 2.

QUESTION 131

Which of the following fractions is the smallest?

A. $3/10$.

B. $6/19$.

C. $3/8$.

D. $11/30$.

E. $12/31$.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Compare all of the answers to A. $3/10$.

B. $3/10 \times 2 = 6/20$ which is smaller than $6/19$.

C. $3/10$ is smaller.

D. $3/10 = 9/30$, and this is smaller than $11/30$.

E. $3/10 = 12/40$ and that is smaller than $12/31$.

The smallest fraction is A.

QUESTION 132

17. Which of the following fractions is the largest?

A. $2/7$.

B. $2/3$.

C. $7/9$.

D. $7/12$.

E. $3/5$.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Let's compare all the answers to $\frac{2}{7}$, unless we find a larger fraction. B. $\frac{2}{3}$ is larger than $\frac{2}{7}$. For now, this is the right answer. C. $\frac{2}{3}$ is also $\frac{6}{9}$ and that is smaller than $\frac{7}{9}$. For now this is the right answer.

D. $\frac{7}{9}$ is bigger than $\frac{7}{12}$.

E. Bring this answer and C. to a common denominator.

$\frac{7}{9} = \frac{35}{45}$ and $\frac{3}{5} = \frac{27}{45}$.

$\frac{7}{9}$ is the largest fraction.

QUESTION 133

If $A^2 + B^2 = 15$ and $AB = 10$, what is the value of the expression $(A - B)^2 + (A + B)^2$?

A. 10.

B. 20.

C. 30.

D. 60.

E. 70.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$(A - B)^2 + (A + B)^2 = A^2 - 2AB + B^2 + A^2 + 2AB + B^2 = 2(A^2 + B^2) = 30.$

QUESTION 134

If A and B are positive integers, which of the following expressions is not an integer for certain?

A. $(2A^2 - 2B^2)/(A+B).$

B. $(6B + 8A)/(3B + 4A).$

C. $(3A - B)/(B - 3A).$

D. $(A + B)/(A^2 + B^2 + 2AB).$

E. $(A^2 - B^2)/(A - B).$

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

All the answers besides D are numbers after some simplification. Answer D = $(A + B)/(A+B)^2 = 1/(A+B)$, and this is a fraction of a number.

QUESTION 135

In the "Big-Reds" parking lot there are 56 vehicles, 18 of them are buses and the rest are private cars. The color of 32 vehicles is red, from which 17 are buses. How many private cars can be found in the parking lot, which are not colored red?

- A. 1.
- B. 23.
- C. 17.
- D. 15.
- E. 20.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Out of 56 vehicles, 32 are colored red, therefore 24 are in different color. 17 of the red vehicles are buses, therefore $(18 - 17 = 1)$ are in different color. $(24 - 1 = 23)$ private cars are in the parking lot with a different color than red.

QUESTION 136

In Sam's hanger there are 23 boxes, 16 out of the boxes are filled with toys and the rest are filled with electrical appliances. 8 boxes are for sale, 5 of them are filled with toys. How many boxes with electrical appliances are in Sam's hanger that is not for sale?

- A. 1.
- B. 2.
- C. 3.
- D. 4.
- E. 5.

Correct Answer: D

Section: Problem-Solving Questions**Explanation****Explanation/Reference:**

Explanation:

8 boxes are for sale, 5 of them are with toys, and therefore 3 of them are with electrical appliances. Out of 23 boxes, 16 are with toys, therefore, and therefore 7 of them are with electrical appliances. ($23 - 16 = 7$) is the number of electrical appliances boxes, which are not for sale.

QUESTION 137

In the fifth grade at Parkway elementary school there are 420 students. 312 students are boys and 250 students are playing soccer. 86% of the students that play soccer are obviously boys. How many girl student are in Parkway that is not playing soccer?

- A. 69.
- B. 73.
- C. 81.
- D. 91.
- E. 108.

Correct Answer: B

Section: Problem-Solving Questions**Explanation****Explanation/Reference:**

Explanation:

There are ($420 - 312 = 108$) girls in Parkway.

86% of 250 are boys, therefore 14% of 250 are girls that play soccer, which is 35 girls. The number of girls that do not play soccer is ($108 - 35 = 73$).

QUESTION 138

In the quiet town of "Nothintodo" there are 600 inhabitants, 400 are unemployed and 300 are somnambulists. If half of the somnambulists are unemployed, how many are employed and are not somnambulists?

- A. 50.
- B. 100.
- C. 150.
- D. 200.
- E. 300.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

There are 300 people that are not somnambulists. There are $(600 - 400 = 200)$ people that are employed in the town, half of the somnambulists are employed (150), therefore $(200 - 150 = 50)$ is the number of people that are employed which are also not somnambulists.

QUESTION 139

In the youth summer village there are 150 people, 75 of them are not working, 50 of them have families and 100 of them like to sing in the shower. What is the largest possible number of people in the village, which are working, that don't have families and that are singing in the shower?

- A. 25.
- B. 50.
- C. 75.
- D. 100.
- E. 150.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The number of people that work is 75.

The number of people that doesn't have families is $(150 - 50 = 100)$.

100 of the people like to sing in the shower.

The largest possible number of people that belong to all three groups is the smallest among them, Meaning 75.

QUESTION 140

In the junior basketball league there are 18 teams, $\frac{2}{3}$ of them are bad and $\frac{1}{2}$ are rich. What can't be the number of teams that are rich and bad?

- A. 4.
- B. 6.
- C. 10.
- D. 7.
- E. 8.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$(\frac{2}{3} \times 18 = 12)$ teams are bad and 9 are rich.

The number of teams which are rich and that are bad must be between 9 and $(9+12-18 = 3)$.

The only answer, which is not in that range, is C.

QUESTION 141

In the third grade of Windblown School there are 108 students, one third of them failed the math test and $\frac{1}{6}$ failed that literature test. At least how many students failed both tests?

- A. 0.
- B. 6.
- C. 8.
- D. 10.
- E. 12.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$(\frac{1}{3} \times 108 = 36)$ failed the math test.

$(\frac{1}{6} \times 108 = 18)$ failed that literature test.

The least amount of people that failed both tests is $(18 + 36 - 108 = -54)$, there can't be a negative overlapping between the groups so the least amount of people who failed both tests is zero.

QUESTION 142

If $\frac{1}{X} = 2.5$, then what is the value of $\frac{1}{(X - \frac{2}{3})}$?

- A. 2.25.
- B. 3.5.
- C. 3.75.
- D. 1.75.
- E. 3.75.

Correct Answer: C

Section: Problem-Solving Questions**Explanation****Explanation/Reference:**

Explanation:

If $1/X$ is 2.5 or $5/2$ then $X = 2/5$.

$1/(2/5 - 2/3)$ is $1/(6/15 - 10/15) = -15/4 = -3.75$.

QUESTION 143

Travis is working as a programmer of IBW. Travis earns \$3,500 annually. If Travis pays 2.5% of that amount quarterly to support groups and he paid \$525 so far, for how many years now has Travis been paying?

- A. 2.
- B. 2.5.
- C. 4.
- D. 5.5.
- E. 6.

Correct Answer: B

Section: Problem-Solving Questions**Explanation****Explanation/Reference:**

Explanation:

Travis pays 2.5% of 3500, which is \$87.5 every 3 months (quarterly). $(525/87.5 = 6)$, therefore Travis has been paying for $(6 \times 3 = 18)$ months now, that is 2.5 years.

QUESTION 144

Dana borrows 5500 pounds annually for her college education. If Dana gives her parents 3% of that amount back each month, how much will she still owe her parents after four years of college?

- A. 12,430.
- B. 13,640.
- C. 14,000.
- D. 14,080.
- E. 15,020.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Dana takes 5500 each year and returns $(0.03 \times 5500 = 165)$ each month, which is $(165 \times 12 = 1980)$ each passing year. That means that each year Dana owes her parents $(5500 - 1980 = 3520)$ pounds. After 4 years in college she will owe them $(4 \times 3520 = 14,080)$ pounds.

QUESTION 145

Mr. Rusty owes the bank \$1,040,000, he returns \$40,000 quarterly to the bank. If the tax on the money Rusty owes is compounded quarterly by 0.25% starting before Rusty paid the first payment, how months would it take poor Rusty to reach a point where he owes the bank no more than 1 million dollars?

- A. 3.
- B. 6.
- C. 9.
- D. 12.
- E. 15.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Every three months Rusty gives the bank \$40,000.

After the first quarter the bank took $(0.0025 \times 1040000 = 2600)$ and Rusty paid \$40,000 so the new Debt is now $(1,040,000 - 40,000 + 2,600 = 1,002,600)$.

After the second quarter the bank took $(0.0025 \times 1002600 = 2506.5)$ and Rusty paid again \$40,000 so the new Debt is now $(1,002,600 - 40,000 + 2506.5 < 1 \text{ million dollars})$.

QUESTION 146

Simba borrowed \$12,000 from his brothers so he can buy a new sports car. If Simba returns 4.5% of that amount every 2 weeks, after how many months Simba wouldn't owe his brothers any more money?

- A. 8.
- B. 12.
- C. 15.
- D. 18.
- E. 20.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Simba gives ($0.045 \times 12,000 = 540$) to his brothers every 2 weeks, in a month he gives ($540 \times 2 = 1080$). ($12,000/1,080$ is a little over 11), therefore after 12 months he won't owe any more money.

QUESTION 147

If A and B are two roots of the equation $x^2 - 6.5x - 17$, then what is the value of $A \times B$?

- A. 15.
- B. 18.
- C. 16.5.
- D. 17.
- E. 22.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The roots of the equation are 8.5 and (-2).
The multiplication of the roots is equal to (-17).

QUESTION 148

If A, B and C are roots of the equation $x^3 - 16x^2 + 48x$, what is the sum of the roots?

- A. 16.
- B. 14.
- C. 17.
- D. 18.5.
- E. 22.5.

Correct Answer: A

Section: Problem-Solving Questions

Explanation**Explanation/Reference:**

Explanation:

The equation can be written as: $X(X^2 - 16X + 48) = X(X - 12)(X - 4)$. The roots of the equation are: 0, 4 and 12. The sum of the roots is 16.

QUESTION 149

If R is a root of the equation $X^2 + 3X - 54$, then which of the following equations have also the root R ?

- A. $X^2 - 12X + 27$.
- B. $X^2 - 6X - 16$.
- C. $X^2 - 10X - 31.25$.
- D. $X^2 - 15X + 54$.
- E. $X^2 + 10X + 16$.

Correct Answer: D

Section: Problem-Solving Questions

Explanation**Explanation/Reference:**

Explanation:

The original equation is $X^2 + 3X - 54$, it can be written as $(X - 6)(X + 9)$. The roots are 6 and (-9). We are looking for an equation that has one of the same roots. Answer D: $X^2 - 15X + 54 = (X - 6)(X - 9)$ This equation has the root 6. All the other answers have different roots than the original equation.

QUESTION 150

If P is a root of the equation $X^3 + 10X^2 + 16X$, then which of the following equations have also the root P ?

- A. $X^2 - 10X + 16$.
- B. $X + 8$.
- C. $X^2 + 3X - 54$.
- D. $X^2 - 6X - 187$.
- E. $X^2 + 8X - 20$.

Correct Answer: B

Section: Problem-Solving Questions

Explanation**Explanation/Reference:**

Explanation:

The original equation is $X^3 + 10X^2 + 16X$, it can be written as $X(X + 8)(X + 2)$. The roots are $(-8), 0$ and (-2) .

We are looking for an equation that has one of the same roots.

Answer B: $X + 8$ This equation has the root (-8) .

All the other answers have different roots than the original equation.

QUESTION 151

If X is a root of the equation $a^3 + 8a^2 - 20a$, then which of the following equations Don't have the root X as one of their roots?

- A. $X^3 + 4X^2 - 32X$.
- B. $X^2 + 18X + 80$.
- C. $X^2 - 12X + 20$.
- D. $X^2 + 5X - 14$.
- E. $X^2 + 10X + 16$.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The original equation is $a^3 + 8a^2 - 20a$, it can be written as $a(a - 2)(X + 10)$. The roots are $2, 0$ and (-10) .

We are looking for an equation that has none of the same roots. Answer E: $X^2 - 10X + 16 = (X + 2)(X + 8)$ This equation has none of the original roots. All the other answers have one or more of the same original roots.

QUESTION 152

(x, y) are the coordinates of the intersection of the following lines:

$(3x - 2y = 8)$ and $(3y + x = 10)$. What is the value of (x/y) ?

- A. 1.
- B. 2.
- C. 3.
- D. 4.
- E. 5.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

There is no need to draw the lines. There are two equations with two variable that you have to solve. Take the second equation and multiply it by (-3) to get: $-9y - 3x = -30$ add this equation to the first and You'll get: $-11y = -22$ $y=2$ and $x=4$. (x/y) is 2.

QUESTION 153

A(a, b) is the coordinates of the intersection between the lines:

$(x + y - 1 = 0)$ and $(4x - 2y = 5)$. What is the shortest distance between A(a, b) and the coordinate B(25/6, 23/6)?

- A. 1.
- B. 2.
- C. 3.
- D. 4.
- E. 5.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

There is no need to draw the two lines. Multiply equation (1) by 2 and then add the equations to get:

$6x = 7$ $x = 7/6$, $y = -1/6$.

Draw a rectangular axis system and mark the point A and B. Complete the two points to a triangle so one of sides is 3 and the other is 4, the hypotenuse, which is also the requested length is 5.

QUESTION 154

P(x, y) is the intersection point between the circle $(x^2 + y^2 = 4)$ and the line $(y = x + 2)$. Which of the following can be the point P?

- A. (1, 2).
- B. (2, 0).
- C. (0, -2).
- D. (-2, 0).
- E. (2, 2).

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

First, draw the circle and the line. The circle is centered at $(0, 0)$ with a radius of 2. You can see that the line and the circle intersect at two points: $(-2, 0)$ and $(0, 2)$. Another way is to insert $y = x + 2$ into the equation of the circle and solve it.

QUESTION 155

What is the area of the rectangle with the following coordinates: (x, y) , $(10, y)$, $(10, 5)$, $(x, 5)$?

- A. 6.
- B. 8.
- C. 12.
- D. 32.
- E. It cannot be determined from the information given.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

First of all, draw the rectangle with the given coordinates. You can see that only one side of the rectangle is given and not the second, therefore there isn't enough data to answer the question.

QUESTION 156

What is the area of the square with the following coordinates: (x, y) , $(20, 20)$, $(20, 5)$, $(x, 5)$?

- A. 60.
- B. 85.
- C. 125.
- D. 225.
- E. It cannot be determined from the information given.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

First of all, draw the square with the given coordinates. We know only one of the square's sides but it's enough because it is a square and both sides are equal.

The area, therefore, is $(15 \times 15 = 225)$.

QUESTION 157

If x and y are positive integers ($x > y$), what is the units' digit of $(10x - 9y)^2$?

- A. 9.
- B. 7.
- C. 5.
- D. 3.
- E. 1.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Try some numbers, $x=2$, $y=1$.

$(10 \times 2 - 9 \times 1)^2 = 81$. And it will work with any given number under the conditions given.

QUESTION 158

If $(R, R^2 + 1)$ is the (x, y) coordinate of a point located on the line: $Y = 2X + 4$, what Can be the value of the parameter R ?

- A. 3.
- B. 2.
- C. 4.
- D. 3.
- E. 1.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If the point is on the line then you can plug the coordinate into the equation.

$Y = 2X + 4$ $R^2 + 1 = 2R + 4$ $R = 3$ or $R = -1$.

Therefore the best answer is D.

QUESTION 159

A(5, w3) is the (x, y) coordinate of point located on the parabola $Y = X^2 + 2$.
What is the value of w?

- A. 3.
- B. 4.
- C. 5.
- D. 6.
- E. 9.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Plug into the equation the coordinate to get: $w3 = 5^2 + 2 = 27$ $w = 3$.

QUESTION 160

A jar of 264 marbles is divided equally among a group of marble-players. If 2 people join the group, each one would receive 1 marble less. How many people are there in the group today?

- A. 20.
- B. 21.
- C. 22.
- D. 23.
- E. 24.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

You can back-solve it. 264 marbles divided by 22 (answer C) is 12 marbles per person. If two people join, there will be 24 people, $264/24$ is 11, which is 1 marble less.

QUESTION 161

A basket of 1430 apples is divided equally among a group of apple lovers. If 45 people join the group, each apple lover would receive 9 apples less. How many apples did each person get before 45 people joined the feast?

- A. 20.
- B. 21.
- C. 22.
- D. 23.
- E. 24.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Try to back-solve the problem. $(1430/22 = 65)$ people, if 45 came then there are 110 people. $(1430/110 = 13)$ apples, which is 9 apples less per person.

QUESTION 162

A confectioner decides to sell all of his pastry due to the coming holiday. His pastry goods are equally divided among a group of 28 regular customers. If only 49 customers come to the bakery, each one will receive 6 less pastry goods. How much pastry does the confectioner need to sell?

- A. 392.
- B. 412.
- C. 432.
- D. 502.
- E. 522.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

You can use the answers to back-solve the question or you could write the equations. Take 392 pastry goods and divide them by 28 customers, each one will receive 14 products. If there were 49 customers, each one would receive $(392/49 = 8)$, which is 6 less.

QUESTION 163

In the equation $4Y - 3kX = 18$, k is a constant and Y equals 42 when X equals 12.

What is the approximate value of X when Y equals 36?

- A. 5.
- B. 10.
- C. 15.
- D. 20.
- E. 25.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

First, find the constant k. Plug in the numbers for X and Y, to receive $4 \times 42 - 3k \times 12 = 18$ $k = (18 - 168)/36 = -25/6$.

Now, plug in the value of Y to receive: $4 \times 36 - 3kX = 18$ after a little math, X is equal to 10.08, therefore the approximate answer is 10.

QUESTION 164

In the equation $(X + Y = k)$, k is a constant and X equals 13 when Y equals 23.5.

What can be the value of X^2 when Y^2 is equal to 36?

- A. 456.5.
- B. 673.25.
- C. 830.75.
- D. 890.35.
- E. 930.25.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

First, find the constant k. Plug in the numbers to get $k = 13 + 23.5 = 36.5$. Now, $Y^2 = 36$ $Y = 6$ or (-6) . Plug both numbers to get $X = 30.5$ or $X = 42.5$.

The best answer is E, $(30.5)^2 = 930.25$.

QUESTION 165

Concentrated orange juice comes inside a cylinder tube with a radius of 2.5 inches and a height of 15 inches. The tubes are packed into wooden boxes, each with dimensions of 11 inches by 10 inches by 31 inches. How many tubes of concentrated orange juice, at the most, can fit into 3 wooden boxes?

- A. 24.
- B. 28.
- C. 36.
- D. 42.
- E. 48.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

You want to waste as little amount of space as possible, therefore make the height of the box 11 and fit 4 boxes at the bottom so you lose only 1 inch of margin at the top and on one of the sides. You can see that 8 tubes can fit into one box thus 24 tubes fit into 3 boxes.

QUESTION 166

A certain car's price decreased by 2.5% (from the original price) each year from 1996 to 2002, during that time the owner of the car invested in a new carburetor and a new audio system for the car, which increased her price by \$1,500. If the price of the car in 1996 was \$22,000, what is the car's price in 2002?

- A. \$18,400
- B. \$19,500
- C. \$20,200
- D. \$20,400
- E. \$21,100

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The price of the car decreased by 2.5% every year on a course of 6 years. That means that the price of the car in 2002 is 15% lower than the original + \$1500 of new investments. The new price is ($\$22,000 \times 0.85 = 18,700 + 1500 = \$20,200$).

QUESTION 167

The average price of an antique car increases over the years. If from 1990 to 1996, the price of the car increased by 13% and from 1996 to 2001 it increased by 20%, what is the price of the car in 2001 if the price in 1990 was \$11,500?

- A. \$15,594.
- B. \$15,322.
- C. \$14,786.
- D. \$14,543.
- E. \$12,988.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The price in 1990 was 11,500. In 1996 the price is $(11,500 \times 1.13 = 12,995)$. The price we are looking for, in 2002, is $(12,995 \times 1.2 = \$15,594)$.

QUESTION 168

The apartment on King-Williams street is an asset that its value is tramping about. From the year 1973 to 1983 it's value decreased by 16% and from 1983 to 1993 it's value increased by 16%. What is the value of the asset in 1993 if in 1973 it was worth \$40,000?

- A. \$38,796.
- B. \$40,000.
- C. \$38,976.
- D. \$39,679.
- E. \$36,796.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Be careful, the value of the asset didn't stay the same after the two changes in the value. In the first 10 years, the value decreased by 16% $(40,000 \times 0.84 = 33,600)$. Then, in the next ten years the value increased by 16% $(33,600 \times 1.16 = 38,976)$.

Therefore the answer is C.

QUESTION 169

The value of a "Tin-Rin" stock in the stock market decreased by 15% in the last two years. The economic experts believe that the value of the stock will increase by 7% during the following year, which will make the value \$440. What was the approximate price of the stock two years ago?

- A. \$473.
- B. \$464.
- C. \$455.
- D. \$445.
- E. \$430.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Start from the top, after a 7% increase the price of the stock is \$440. 440 are 107% of the price this year ($440/107 \times 100 = 411.215$). Two years ago the price was 15% higher, therefore (411.215×1.15) is approximately \$473.

QUESTION 170

Which of the following expressions is equivalent to ?

- A. $X < 4$.
- B. $X > 4$.
- C. $X > -4$.
- D. $4 < X < -4$.
- E. $4 < X < 4$.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

An absolute value means that the sign of the variable is insignificant, therefore X can be between 4 and 4 and still he will fulfill the original equation.

QUESTION 171

Which of the following statements is equivalent to $(8 + 2X < 18 \quad 6X < 23 + 2X)$?

- A. $4/5 < X < 2.5$.
- B. $4/5 < X < 8/5$.
- C. $-5/8 < X < 5/4$.

D. $2.5 < X < 3.5$.

E. $5 < 8X < 12$.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Take the expression and simplify it: Take $(8 + 2x)$ from each side to get: $(0 < 10 - 8X < 15)$.

Substitute 10, $-10 < -8X < 5$.

Divide all by (-8) , $5/4 > X > -5/8$. Therefore the answer is C.

QUESTION 172

At the faculty of Aerospace Engineering, 312 students study Random-processing methods, 232 students study Scramjet rocket engines and 112 students study them both. If every student in the faculty has to study one of the two subjects, how many students are there in the faculty of Aerospace Engineering?

A. 424.

B. 428.

C. 430.

D. 432.

E. 436.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Use the group formula.

Total = groupA + groupB Both + Neither.

Total = $312 + 232 - 112 + 0 = 432$ students.

QUESTION 173

In the faculty of Reverse-Engineering, 226 second year students study numeric methods, 423 second year students study automatic control of airborne vehicles and 134 second year students study them both. How many students are there in the faculty if the second year students are approximately 80% of the total?

- A. 515.
- B. 545.
- C. 618.
- D. 644.
- E. 666.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Use the group formula.

Total = groupA + groupB Both + Neither.

Total = $226 + 423 + 134 + 0 = 515$ second year students.

The second year students are 80% of the total amount, therefore $(515/80 \times 100 = 643.75)$.

The best answer is D.

QUESTION 174

In the Biotechnology class of 2000, there were X graduates. 32 of the graduates found a job, 45 continued on to their second degree and 13 did both. If only 9 people didn't do both, What is X equal to?

- A. 69.
- B. 71.
- C. 73.
- D. 75.
- E. 76.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Use the group formula.

Total = groupA + groupB Both + Neither.

Total = $32 + 45 + 13 + 9 = 73$ graduates.

QUESTION 175

Kramer can pack X boxes of cigarettes per minute. If there are Y boxes of cigarettes in one case, How many cases can Kramer pack in 2 hours?

- A. $60X/Y$.
- B. $120X/Y$.
- C. $60Y/X$.
- D. $120Y/X$.
- E. $(X + Y)/60$.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Y/X is the time it takes Kramer to fill a case with boxes (in minutes). In two hours there are 120 minutes, so $120/(Y/X)$ is $120X/Y$, and that is the number of cases that Kramer can fill in two hours.

QUESTION 176

The roof of an apartment building is rectangular and its length is 4 times longer than its width. If the area of the roof is 784 feet squared, what is the difference between the length and the width of the roof?

- A. 38.
- B. 40.
- C. 42.
- D. 44.
- E. 46.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The area of a rectangle is (length) \times (width), let X be the width of the roof $4X^2 = 784$ $X^2 = 196$ $X = 14$.
The width of the roof is 14 and the length is 56. The difference is $(56-14 = 42)$.

QUESTION 177

The length of a cube is three times its width and half of its height. If the volume of the Cube is 13,122 Cm cubed. What is the height of the cube?

- A. 49.
- B. 50.
- C. 54.
- D. 68.
- E. 81.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Normalize each dimension to the width of the cube (W).

The length is 3 times the width, therefore its $3W$, which is half of the height ($6W$). The volume of the cube is $13,122 = 6W \times 3W \times W = 18W^3$ $W^3 = 729$
 $W = 9$. The height of the cube is six times the width, therefore its 54 meters.

QUESTION 178

The width of a cube is half the length and one third of the height. If the length of the cube is 4 meters, what is the volume of three identical cubes?

- A. 96.
- B. 88.
- C. 74.
- D. 68.
- E. 62.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Normalize all the dimensions to the width. Let the width be X .

The length is twice the width, thus $2X$.

The height is 3 times the width, thus $3X$.

The volume of the cube is $= 6X^3$.

The length is equal to 4 $2X = 4$ $X = 2$ Volume $= 6 \times 8 = 48$.

The volume of two cubes will be 96.

QUESTION 179

Two brothers took the GMAT exam, the higher score is X and the lower one is Y . If the difference between the two scores is equal to their average, what is the value of Y/X ?

- A. 3.
- B. 2.
- C. $\frac{1}{2}$.
- D. $\frac{1}{3}$.
- E. There isn't enough data to answer the question.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If the difference is equal to the average, then we could write the equation: $X - Y = (X + Y)/2$.

$X - 3Y = 0 \quad Y/X = 1/3$.

QUESTION 180

Two people measure each other's height, the height of the taller person is H and the height of the other person is L . If the differences in their height are equal to their average height, what is the Value of H/L ?

- A. $\frac{1}{3}$.
- B. $\frac{1}{2}$.
- C. 2.
- D. 3.
- E. 6.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If the difference is equal to the average, then we could write the equation: $H - L = (H + L)/2$.

$H - 3L = 0 \quad H/L = 3$.

QUESTION 181

A student is studying for a test from 11:00 A.M to 20:00 P.M on weekdays and one third of that time on Saturdays, on Sundays he takes a break from

school and goes fishing. For what fractional part of the entire week is the student studying?

- A. $2/5$.
- B. $3/7$.
- C. $2/7$.
- D. $3/8$.
- E. $5/2$.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

On weekdays, the student studies for 9 hours, on Saturdays 3 hours.

In one week the student studies for $(5 \times 9 + 3 = 48)$.

The total number of hours in one week is $(24 \times 7 = 168)$.

$48 \text{ hours} / 168 \text{ total hours} = 2/7$.

QUESTION 182

An average teenager sleeps from 23:00 P.M till 7:30 in the morning of a schools night and on the weekend, which is Friday and Saturdays he sleeps 50% more each night. For what fraction part of the entire week is the teenager asleep?

- A. $48.75/168$.
- B. $52.5/120$.
- C. $17/42$.
- D. $55.5/168$.
- E. $15/38$.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

In one week there are $(24 \times 7 = 168)$ hours.

The average teenager sleeps 8.5 hours on weekdays and $(1.5 \times 8.5 = 12.75)$ hours on the weekend. Altogether, the total sleeping time per one week is $(8.5 \times 5 + 12.75 \times 2 = 68)$.

The fractional part of the sleep is $(68/168 = 17/42)$.

QUESTION 183

The number 12 bus is working from 6:00 in the morning to 10:00 P.M on weekdays only. On Saturdays and Sundays the bus goes to the garage 3 times a day for upgrading, each time for 3 hours. For what fraction part of the entire week is the bus on the road?

- A. $5/12$.
- B. $4/7$.
- C. $7/9$.
- D. $6/11$.
- E. $7/12$.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

In one week there are ($24 \times 7 = 168$) hours.

The bus is on the road everyday, on weekdays he is 16 hours on the road and on Saturdays and Sundays he drives for 9 hours each day. The total amount of hours is ($16 \times 5 + 18 = 98$). The fraction part of the week is ($98/168 = 7/12$).

QUESTION 184

Lilac has three times more Barbie dolls than Orly. If Lilac gives 6 dolls to Nirit, she would have 21 dolls left. How many dolls does Orly have?

- A. 5.
- B. 7.
- C. 9.
- D. 11.
- E. 13.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The easiest way to solve such problems is by back-solving it. Take answer C: If Orly has 9 dolls then Lilac has 27. If Lilac would give away 6 dolls she would really have 21 dolls left.

QUESTION 185

"Tires R' us" have 4 times more tires for sale than any regular tire shop. If "Tires R' Us" Sells 122 tires, they will have only three times more tires than the rest. How many more tires do "Tires R' us" have than the regular tire shop?

- A. 488.
- B. 388.
- C. 366.
- D. 299.
- E. 188.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Let's write the equations that come from the data: define x as the number of tires of "Tires R' us" and y as number of tires of the regular shop.

$X = 4Y$ and $X - 122 = 3Y$ $X = 488$, $Y = 122$. $X - Y = 366$.

QUESTION 186

If $512 = (A + 48)^3$, then $(A + 53)$ is equal to

- A. 13.
- B. -10.
- C. 15.
- D. -12.
- E. 5.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If $512 = (A + 48)^3$ $A + 48 = 8$ $A = -40$.

Therefore, $A + 53 = 13$.

QUESTION 187

If $529 = (Y - 7)^2$, then $Y/3$ is equal to

- A. 6.
- B. 8.
- C. 9.
- D. 10.
- E. 12.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$529 = (Y - 7)^2$, take the root out of both sides to get $23 = Y - 7$ $Y = 30$.

Therefore $Y/3$ is equal to 10.

QUESTION 188

The East-17 pre-school is upgrading all of his classrooms by buying 46 computers, 6 printers and 5 fax machines. If a computer costs 4 times more than a printer and 2 times more than the fax machine, what percent of the cost of the entire purchase was the cost of one computer, 2 printers and 1 fax machine?

- A. 1%.
- B. 2%.
- C. 3%.
- D. 4%.
- E. 5%.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Let's define the price of a printer as X , the computer costs $4X$ and the fax costs $2X$. The total price of all the merchandise is $(46 \times 4)X + 6X + 10X = 200X$. The specific group that was asked upon is worth $4X + 2X + 2X = 8X$.

The percentage of the price is $(8/200)$ 4%.

QUESTION 189

A newly wed couple is designing their new house by purchasing 10 chairs, 3 desks, 3 televisions and 4 closets. If the price ratio between the new merchandise is

1 : 3 : 4 : 4, what fraction of the cost of the entire purchase was the cost of a desk and a closet?

- A. $6/31$.
- B. $7/47$.
- C. $5/28$.
- D. $9/43$.
- E. $11/45$.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Let X be the price of a single chair, normalize all the prices to the price of a chair. The total price of the entire purchase is: $10X + 9X + 12X + 16X = 47X$.

The specific purchase costs: $3X + 4X = 7X$.

The percent required is $7/47$.

QUESTION 190

A grocery store ordered a delivery of fresh milk products that contained 45 milk bottles, 24 cheese packs and 23 cartons of chocolate milk. If the chocolate milk carton costs like a bottle of milk, which is three times the price of a cheese pack, what fraction of the cost of the entire purchase was the cost of 20 bottles of milk, 1 pack of cheese and 5 chocolate milk cartons?

- A. $1/6$.
- B. $2/5$.
- C. $1/4$.
- D. $1/3$.
- E. $3/7$.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Let X is the price of a pack of cheese.

The price of the entire purchase is $(45 \times 3)X + 24X + (23 \times 3)X = 228X$.

The specific required purchase is $60X + X + 15X = 76X$.

The fraction of the specific purchase and the entire purchase is $76/228 = 1/3$.

QUESTION 191

If A and B are two prime numbers bigger than 2, which of the following can't be true?

- (1) $A + B$ is an even number.
- (2) $A \times B$ is also a prime number.
- (3) AB is also a prime number.

- A. 1 only.
- B. 2 only.
- C. 3 only.
- D. 2 and 3 only.
- E. 1, 2 and 3.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Try to find opposing examples to the statements.

- 1. Pick $A=7$, $B=13$ $A+B = 20$, this is an even number.
- 2. Try $A=3$, $B=7$ $AB=21$, and 21 is not a prime number.
- 3. Try $A=3$, $B=5$ $AB = 35 = 3 \times 3 \times 3 \times 3 \times 3 =$ a number which is dividable by 3 and 9 and therefore is not a prime number. Statements 2 and 3 can't be true, the answer is D.

QUESTION 192

If X and Y are consecutive numbers ($Y > X$), which of the following statements could be false?

- 1. The multiplication XY is an even number.
- 2. $(Y/X) > 1$.
- 3. $(X + Y)$ is always an odd number.

- A. 1 only.
- B. 2 only.
- C. 1 and 2 only.
- D. 1 and 3 only.
- E. 1, 2 and 3.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Let's go over each statement's at a time.

1, the multiplication of two consecutive numbers is always an even number. 2, Try $x=2$, $y=3$ In this case $3/2$ is bigger than 1 but if you choose $x=-3$, $y=-2$, y/x is $2/3$ and that's smaller than 1. Therefore this statement is not always true. 3, the sum of two consecutive numbers is always odd, try some numbers.

Therefore, only statement 2 is false.

QUESTION 193

X and Y are integers, X is even and negative, Y is odd and positive. Which of the following could be false?

1. $(X + Y)$ is an odd number.
2. $Y(X + Y)$ is an integer.
3. XY is a positive number.

- A. 2 only.
- B. 3 only.
- C. 1 and 3 only.
- D. 2 and 3 only.
- E. 1, 2 and 3.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Find opposing examples for each of the statements.

- 1: An odd number + an even number are always an odd number.
 - 2: Try the numbers: $X=-4$, $Y=3$ $3(-1) = 1/3$ which is not an integer.
 - 3: Try the numbers: $X=-2$, $Y=3$ $XY = (-2)3 = -8$, which is not positive.
- Statements 2 and 3 are not necessarily true.

QUESTION 194

W is between (-1) and (0) , which of the following is least?

- A. W.
- B. W^2 .

- C. $1/W$.
- D. $(1/W)^2$.
- E. 0.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Try a number between 1 and 0, for example $1/2$.

$1/2$.

$1/4$.

2.

4.

0.

The smallest number is 2.

QUESTION 195

If R is between (-2) and (2) , which of the following can be the greatest?

- A. $(1/R)$.
- B. R^2 .
- C. R^3 .
- D. R^4 .
- E. 3^2 .

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If we can choose any number between (-2) and (2) , choose a really small number, for example $(1/100)$ plug it in answer (a), $(1/1/100) = 100$ none of the other answers can be larger.

QUESTION 196

If all values of X such as $(0 < X < 1)$, which can be the least?

- A. 0.
- B. X.
- C. X^2 .
- D. $(X - 1)^2$.
- E. X^3 .

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Since X is a fraction between 0 and 1, the smallest answer will be that of the highest power, since all the answers are positive. Therefore E. is the smallest possible. Pay attention to answer (d), it's the same as (c); it's a fraction between 0 and 1 squared.

QUESTION 197

A train traveled for three hours. In the first hour the train traveled 86 miles, which was 25% farther than it traveled in the first hour. In the third hour the train traveled at a speed of 120 miles per hour for 20 minutes. What is the total distance that the train traveled?

- A. 190.6.
- B. 194.8.
- C. 198.2.
- D. 204.5.
- E. 212.8.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

In the first hour it traveled 86 miles.

In the second hour it traveled x miles, $x + 0.25x = 86$ $x = 68.8$ miles.

In the third hour it traveled $(120 \times \frac{1}{3} = 40)$ miles.

The total distance is $(86 + 68.6 + 40 = 194.8)$ miles.

QUESTION 198

A cruise ship traveled for 3 hours. In the first hour, the ship sailed at a speed of 25 Km/h, which was 25% faster than the speed in the third hour. In the middle hour the ship sailed at the average speed of the first and third hours. What was the total instance of the ship during the 3 hours of sailing?

- A. 65.
- B. 66.5.
- C. 67.5.
- D. 70.
- E. 72.5.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The distance in the first hour is 25 Km.

The speed in the third hour is $(25/1.25 = 20 \text{ Km/h})$ and therefore the distance is 20 Km. The average speed is 22.2 Km/h and that is also the distance.

The total distance is $25 + 20 + 22.5 = 67.5 \text{ Km}$.

QUESTION 199

Two cars are driving towards one another. The first car is traveling at a speed of 120 Km/h, which is 28% faster than the second car. If the distance between the cars is 855 Km, how long will it take the cars to meet (in hours)?

- A. 2.5.
- B. 3.
- C. 3.5.
- D. 4.
- E. 4.5.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The speed of the second car is X, $(X + 0.28X = 120) X = 93.75 \text{ Km/h}$. In order to find the time it will take the cars to meet, you should divide the total distance by the sum of the car's speeds: $(855 / (120+93.75) = 4)$. Therefore the answer is D, four hours.

QUESTION 200

Three cars are starting to drive from three corners of a huge equilateral triangle towards the middle. Car A can travel at a speed of 110 miles per hour, car B can travel 10% less and car C can travel the average speed of the first two cars. If all cars leave at the same time and it took car A 30

minutes to get to the middle, how long approximately after car C reached the middle, did car B reached it?

- A. About 15 minutes.
- B. About 10 minutes.
- C. About 5 minutes.
- D. About 1.5 minutes.
- E. They reached the middle at the same time.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Start with the speeds of the cars:

Car A can travel at 110 mp/h.

Car B can travel at a speed of (110×0.9) 99 mp/h.

Car C can travel at a speed of $(110 + 99)/2 = 104.5$ mp/h. If it took car A 30 minutes, the length towards the middle of the triangle is 55 miles. Calculate how long it takes car B and car C travel 55 miles:

Car B It will take her $(55/99)$ hours which is 33 minutes and a third. Car C It will take her $(55/104.5)$ hours which is approximately 31.6 minutes.

Therefore the differences in the time will be approximately 1.5 minutes.

QUESTION 201

Danny and Steve are running towards each other, each one from his own house. Danny can reach Steve's house in 25 minutes of running, which is half the time it takes Steve to reach Danny's house. If the two started to run at the same time, how much time longer will it take Steve to reach the middle than Danny?

- A. 12.5 minutes.
- B. 25 minutes.
- C. 35 minutes.
- D. 50 minutes.
- E. 75 minutes.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If it takes Danny 25 minutes to travel the full way, it would take him 12.5 minutes to reach the middle. If it takes Steve 50 minutes to travel the full way, it

would take him 25 minutes to reach the middle. The difference in the time it takes them to reach the middle is 12.5 minutes.

QUESTION 202

A green lizard can travel from the green cave to the blue cave in 108 minutes; the blue lizard can travel from the blue cave to the green cave in 25% less time. If the green lizard started to travel 7.5 minutes before the blue lizard, how many minutes after the blue lizard, will the green lizard pass the middle line?

- A. 2.
- B. 3.5.
- C. 4.
- D. 5.5.
- E. 6.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

It takes the green lizard ($108/2 = 54$) minutes to reach the middle. It takes the blue lizard ($(108 \times 0.75 = 81)/2 = 40.5$) minutes to reach the middle. The green lizard started to travel 7.5 minutes ahead of the blue lizard and therefore the differences in the time they reach the middle is $(54 - 7.5 - 40.5 = 6)$ minutes.

QUESTION 203

When an integer Q is divided by 6, the remainder is 4.
Which of the following is not a multiple of 6?

- A. $Q + 2$.
- B. $Q - 4$.
- C. $2Q + 6$.
- D. $3Q$.
- E. $4Q + 2$.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Pick a number that fits into the question, for example 10. The only answer that is not a multiple of 6 is C, $2Q + 6 = 26$. And 26 are not divisible by 6.

QUESTION 204

When the integer Y is divided by 11, the remainder is 3.
Which of the following can't be a multiple of $(Y+1)$?

- A. $2Y + 2$.
- B. $1.5Y + 9$.
- C. $2.5Y - 5$.
- D. $3Y + 3$.
- E. $3Y - 5$.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Plug in a number that will give a remainder of 3 when divided by 11, for example 14. We are looking for a number that is not a factor of $(Y+1 = 15)$. The only answer that is not a factor of 15 is E. $3Y - 5 = 37$.

QUESTION 205

When the integer X is divided by 5, the remainder is 2.
Which of the following can be a multiple of $(X+3)$?

- A. $8X + 7$.
- B. $9X - 3$.
- C. $11X - 4$.
- D. $13X$.
- E. $13X + 1$.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Plug in a number that will give a remainder of 2 when divided by 5, for example 7.
We are looking for a number that is a factor of 10.

The only possible answer is $B \ 9 \times 7 \ 3 = 60$, and that is a factor of 10.

QUESTION 206

Harris invested \$45,000 in two different ventures, a car-cleaning machine and a video mat. The yearly return on the video mat was 12% and the yearly return on the car-cleaning machine was 8%. If the total return was \$4,000, how much did Harris invest in the video mat?

- A. \$8,000.
- B. \$10,000.
- C. \$14,000.
- D. \$22,000.
- E. \$35,000.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The easiest way is to back solve the question.

Take answer B, if that is the amount Harris invested in the video mat; the annual return was \$1,200. Therefore there are \$35,000 left to invest in the car-cleaning machine, 8% of 35,000 is \$2,800. Sum them up; the total return is like the question asked- \$4,000.

QUESTION 207

Jennifer bought two apartments in order to rent them to other people with \$300,000. The monthly return on the first apartment is 1.5% of its value and on the second apartment the return is 2% of its value. If the total returns of the entire year were \$61,200, how much did Jennifer spent on the second apartment?

- A. \$100,000
- B. \$120,000
- C. \$150,000
- D. \$180,000
- E. \$210,000

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The easiest way is to back solve the question.

Take answer B, if that is the amount Jennifer invested in the second apartment; the annual return from that apartment was $(120,000 \times 0.24 = 28,800)$.

Therefore there are \$180,000 left to invest in the first apartment, 18% of \$180,000 is \$32,400.

Sum them up; the total return is like the question asked- \$61,200.

QUESTION 208

Two cars are traveling on the same road towards each other. If car A is traveling at a speed of 120 Km/h and car B is traveling 15% slower, how much time will it take the cars to meet if the initial distance between the two is 668.4 Km and car A started to drive one hour and a half before car B started?

- A. one hours and 30 minutes.
- B. two hours.
- C. two hours and 12 minutes.
- D. three hours and 15 minutes.
- E. three hours and 18 minutes.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Car B is traveling at a speed of $0.85 \times 120 = 102$ Km/h.

Car A travels alone a distance of $120 \times 1.5 = 180$ Km. The remaining distance should be divided among the sum of the cars speeds: $(668.4 - 180 = 488.4 \text{ Km}) / (102 + 120) = 2.2 =$ Two hours and 12 minutes.

QUESTION 209

Water has been poured into an empty rectangular tank at the rate of 8 cubic feet per minute for 2.5 minutes. The length of the tank is 3 feet and the width is one half of the length. Approximately how deep is the water in the tank?

- A. 3.23 feet
- B. 3.86 feet
- C. 4 feet
- D. 4.25 feet
- E. 4.44 feet

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

First calculate the volume of water that has been poured into the tank. If it has been poured at a rate of 8 cubic feet per minute for 2.5 minutes, $8 \times 2.5 = 20$ cubic feet. The tank is rectangular, so its volume is length \times width \times height (or depth), with the answer in cubic units. We are given the length, and can calculate the width, since we are told that the width is $\frac{1}{2}$ the length, or $\frac{1}{2}$ of 3 feet, or 1.5 feet. The volume we have already calculated to be 20 cubic feet. Therefore, $20 = \text{length} \times \text{width} \times \text{height}$, or $20 = 3 \text{ feet} \times 1.5 \text{ feet} \times \text{the height}$. Solving for the height, we get $\frac{40}{9}$, or approximately 4.44 feet.

QUESTION 210

In Tukitu village, one forth of the people are raising flowers, one ninth is growing wheat and one eleventh are going bankrupt. What could be the number of people in the village?

- A. 792.
- B. 540.
- C. 198.
- D. 132.
- E. 346.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The answer must be a number that is divisible equally by 4, 9 and 11.
The only possible answer is A.

QUESTION 211

$352 - 342 = ?$

- A. 35 34.
- B. $35 + 34$.
- C. 352.
- D. $2 \times 35 \times 34$.
- E. 34.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$$352 - 342 = (35 - 34)(35 + 34) = 1(35 + 34).$$

QUESTION 212

Tom divided his cards between Tim and Din so each one received an odd amount of cards. The number of cards that Tim received multiplied by the number of cards that Din received is a number larger than 49 and smaller than 121. How many cards did Tom have in the first place?

- A. 16.
- B. 22.
- C. 18.
- D. 14.
- E. 32.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Answers A and E are disqualified immediately because those are even numbers that cannot be divided into two odd numbers. 22 is $11 + 11$ but 11×11 is bigger than 121, the same idea with 14, therefore the answer is 18. $18 = 9 + 9$. $9 \times 9 = 81$.

QUESTION 213

In the beginning of the season, the owner of a football team bought T players for the price of $4R$ each. At the end of the season the owner sold the players in a total profit of X . How much did the owner get for all the players?

- A. $X - 4TR$.
- B. $4X + 4TR$.
- C. $4TR + X$.
- D. $4(TR - X)$.
- E. $4TR - X$.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The owner bought T player that cost him altogether 4TR.
He had a profit of X so he sold them for 4TR + X.

QUESTION 214

A bird is flying from an oak tree to a pine tree in a speed of 6 Km/h. On her way back, she flew at a speed of 4 Km/h, thus, the trip lasted 4 hours more. What is the distance between the trees? (In Km)

- A. 12.
- B. 24.
- C. 36.
- D. 48.
- E. 52.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The distance to the pine tree is $6 \times X$, where X represents the time of the trip. The distance back to the oak tree is $4(X+4)$, assuming the trip back is equal in length. Therefore $6X = 4(X+4)$ $X = 8$. The length of the trip is $8 \times 6 = 48$ Km.

QUESTION 215

A credit card number has 6 digits (between 1 to 9). The first two digits are 12 in that order, the third digit is bigger than 6, the forth one can be equally divided by 3 and the fifth digit is 3 times bigger than the sixth one. How many credit cards can be made?

- A. 27.
- B. 36.
- C. 72.
- D. 112.
- E. 422.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

First digit is 1, the second is 2, the third can be (7,8,9), the forth can be (0,3,6,9), the fifth and the sixth are dependent with one another. The fifth one is 3

times bigger than the sixth one, therefore there are only 3 options there: (1,3), (2,6), (3,9).
All together there are: $1 \times 1 \times 3 \times 4 \times 3 = 36$ options.

QUESTION 216

Out of a box that contains 4 black mice and 6 white ones, three are picked up. What is the probability that all three will be black mice?

- A. $8/125$.
- B. $1/30$.
- C. $2/5$.
- D. $1/720$.
- E. $3/10$.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The probability for the first one to be black is: $4/(4+6) = 2/5$. The probability for the second one to be black is: $3/(3+6) = 1/3$. The probability for the third one to be black is: $2/(2+6) = 1/4$. The probability for all three events is $(2/5) \times (1/3) \times (1/4) = 1/30$.

QUESTION 217

A car is driving at 60 Km/h for 20 minutes, and then drives at 90Km/h for another 40 minutes. What is the average speed of the car?

- A. 80.
- B. 75.
- C. 70.
- D. 65.
- E. 54.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The average speed is equal to: $(\text{Total distance})/(\text{Total time}) = (60 \times 1/3 + 90 \times 2/3)/1 = 80 \text{ Km/h}$.

QUESTION 218

Two grandfathers can nit a sweater in 6 days. Two grandfathers and one grandmother can nit a sweater in 3 days. How many days will it take the grandmother to nit a sweater all by her self?

- A. 4.5.
- B. 5.
- C. 5.5.
- D. 6.
- E. 6.5.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Two grandfathers and a grandmother can nit a sweater in 3 days, therefore they can nit 2 sweaters in 6 days. Because two grandfathers can nit 1 in 6 days then the other sweater is done by the grandmother, she can nit 1 sweater in 6 days.

QUESTION 219

Two adjacent angles of a parallelogram are in the ratio of 1:3. What is the smaller angle of the two?

- A. 30.
- B. 45.
- C. 90.
- D. 135.
- E. 180.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The sum of two adjacent angles in a parallelogram is 180. 180 divided by 4(1+3) is 45 and that is the size of the smallest among the angles.

QUESTION 220

Two adjacent angles of a parallelogram are in the ratio of 2:3. What is their average size?

- A. 30.
- B. 40.
- C. 45.
- D. 90.
- E. 180.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The ratio doesn't give us anything, two adjacent angles of a parallelogram always sum up to 180 degrees. And $180/2$ is always 90 degrees.

QUESTION 221

The angles of a triangle are in the ratio of 3: 2: 1. The largest angle in the triangle is:

- A. 36.
- B. 45.
- C. 72.
- D. 90.
- E. 108.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The sum of all the angles is 180. Divide 180 by 6 ($3+2+1$) and we'll get 36; this is the size of the smallest angle. The largest angle is three times bigger, thus $36 \times 3 = 108$ degrees.

QUESTION 222

The perimeter of a circle is approximately 6.3 centimeters. The area of the same circle is A. which of the following is true?

- A. $1 < A < 2$.
- B. $2 < A < 3$.
- C. $3 < A < 4$.

D. $4 < A < 5$.

E. $A > 5$.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The perimeter of a circle is , cm.

, Therefore A is approximately pie (3.14).

QUESTION 223

John bought grocery products for 10 dollars using 55 coins. If John used quarters and dimes, what is the difference between the numbers of dimes to the number of quarters that he used?

A. 5.

B. 10.

C. 15.

D. 25.

E. 30.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Define X as the number of dimes that John used. Just a reminder, dimes are 10 cents coins. The number of quarters that he used is $(55 - X)$. We can write the following equation:

$10X + 25(55 - X) = 1000$. Notice that 1000 is the money he spent in cents.

Therefore $(15X = -375) X = 25$.

The number of dimes is 25 and the number of quarters is $(55 - 25 = 30)$.

The difference between the amounts is 5 coins.

QUESTION 224

Rick deposited \$850 to his bank account using \$5 and \$15 dollar bills only. If Rick came to the bank with 70 bills and left with 10 bills only, how many \$15 dollar bills did he deposit?

- A. 5.
- B. 25.
- C. 50.
- D. 55.
- E. 65.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Rick came to the bank with 70 bills and left with 10 and therefore he deposited 60 bills. Define X as the number of \$5 dollar bills that he deposited and so $(60 - X)$ is the number of \$15 bills that he deposited.

We can write the following equation: $5X + 15(60 - X) = 850 - 10X = -50X = 5$.

The number of \$15 dollar bills is $(60 - 5) 55$.

QUESTION 225

The average (arithmetic mean) of four numbers is equal to three times the largest number. If the largest number is equal to 3, what is the sum of the other three numbers?

- A. 28.
- B. 33.
- C. 35.
- D. 38.
- E. 42.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Let's say the four numbers are: X, Y, Z and W.

The average of all four numbers is equal to 3 times the value of the largest number:

$(X+Y+Z+W)/4 = 3W$. W is equal to 3 and therefore $(X+Y+Z+3) = 3 \times 9$ $X+Y+Z = 36-3 = 33$.

QUESTION 226

What is the reciprocal of $(AB)/(A + B)^2$?

- A. $(AB)/(A^2 + 2AB + B^2)$.
- B. $A/B + B/A + AB$.
- C. $B/A + A/B + 2$.
- D. $(A^2 + B^2)/AB$.
- E. $A/B + 2AB$.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The reciprocal of X is $1/X$ and therefore the reciprocal of $(AB)/(A + B)^2$ is $(A + B)^2/AB$. Simplify the expression: $(A + B)^2/AB = (A^2 + 2AB + B^2)/AB = A/B + B/A + 2$.

QUESTION 227

Naomi drives to the beauty parlor in 60 minutes. On the way back, her average speed is half the average speed as it was to the way to the parlor. How much time will it take Naomi to travel two round trips to the beauty parlor?

- A. 3 hours.
- B. 4 hours.
- C. 4 hours and 20 minutes.
- D. 5 hours and 50 minutes.
- E. 6 hours.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If the average speed from the beauty parlor is half of the average speed to the parlor then the time back from the parlor is twice the time it takes her to get to the parlor, thus 120 minutes. The total round trip will take Naomi $(60 + 120 = 180)$ minutes, which is 3 hours. Two round trips will take her 6 hours.

QUESTION 228

It takes Tanya 50 minutes to drive to the country club. If the average speed of the entire round trip to the club is 87.5% of the average speed on the way to the club, how many minutes approximately will it take Tanya to drive home from the country club?

- A. 42 minutes.
- B. 48 minutes.
- C. 52 minutes.
- D. 54 minutes.
- E. 66 minutes.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Define X as the average speed to the country club and Y as the average speed on the way back. The average speed of the entire round trip to the club is 87.5% of the average speed on the way to the club: $(X + Y)/2 = 0.875X$ $X + Y = 1.75X$ $Y = 0.75X$.

The average speed on the way back is 75% of the speed to the club. If the time it takes her to get to the country is T, then $T/0.75$ is the time it will take to get back home.

$50/0.75 =$ approximately 66 minutes.

QUESTION 229

It costs \$4 for the first $\frac{1}{4}$ hour to use the laundry machine at the Laundromat. After the first $\frac{1}{4}$ hour it costs \$12 per hour. If a certain customer uses the laundry machine for 3 hours and 25 minutes, how much will it cost him?

- A. \$25.
- B. \$32.
- C. \$36.
- D. \$40.
- E. \$42.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The customer uses the machine for 3 hours and 25 minutes. The first 15 minutes cost him \$4 and he has 3 hours and 10 minutes left, which is $(12 \times 3 = \$36) + 10$ minutes. 10 minutes are $\frac{1}{6}$ of an hour, which is $(\frac{1}{6} \times 12 = \$2)$.

The total cost will be: $4 + 36 + 2 = \$42$.

QUESTION 230

The mall charges 50 cents for the first hour of parking and \$3 for each additional hour until the customer reaches 4 hours, after that the parking fee is \$1 per hour. If a certain customer parked his in the mall for 7 hours and 30 minutes, how much is he going to pay?

- A. \$11.5.
- B. \$12.
- C. \$13.
- D. \$14.5.
- E. \$15.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The customer parked for 7 hours and 30 minutes. Divide the problem into parts:

The first hour cost him 0.5 dollars. He has 6.5 hours left. The next three hours cost him 3 dollars per hour, \$9 in total for that time. He has $(7.5 - 4 = 3.5)$ hours left) at a wage of \$1 per hour, it sums up to 3.5 additional dollars.

Sum it all up: $0.5 + 9 + 3.5 = \$13$.

QUESTION 231

If $(0 < X < Y)$, X is an odd number and Y is a prime number, which of the following can be the value of $X + Y$?

- A. 11.
- B. 13.
- C. 17.
- D. 10.
- E. 7.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Every prime number except 2 is an odd number. If $Y = 2$, then X must have been 1 because X is smaller than Y but this answer doesn't appear among the answers and therefore Y is odd. If X and Y are both odd numbers, their sum must be an even number. The only even answer is D.

QUESTION 232

It takes Avery 3 hours to build a brick wall while Tom can do it in 2.5 hours. If the two start working together and after an hour Avery leaves, how much time will it take Tom to complete the wall on his own?

- A. 25 minutes.
- B. 30 minutes.
- C. 40 minutes.
- D. 55 minutes.
- E. 1 hour and 20 minutes.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The output of Avery is $\frac{1}{3}$ walls in one hour and the output of Tom is $\frac{2}{5}$ walls in one hour. The two worked together for one hour, their combined output is $(\frac{1}{3} + \frac{2}{5} = \frac{11}{15})$ wall and that's the fraction of the wall that they completed together.

Tom has $(1 - \frac{11}{15} = \frac{4}{15})$ wall left, with his current output it will take him $(\frac{4}{15} / \frac{2}{5}) = \frac{2}{3}$ hours, which is 40 minutes.

QUESTION 233

There are three foam generators in the factory, the first two can generate 14 liters of foam in one hour and the third can generate 18 liters in an hour.

The three generators start working together at the same time and after one hour and a half one of the first generators stops working and two hours after that the third generator stops working and only one generator is left. If 5 hours after they all started to work the last generator stops working, how many liters of foam were generated?

- A. 120.
- B. 132.
- C. 146.
- D. 154.
- E. 166.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

In the first hour and a half all the generators worked and produced $(14 + 14 + 18) \times (1.5) = (69)$ liters. In the next two hours two generators worked and produced $(14 + 18) \times (2) = (64)$ liters. The rest of the time $(5 - 1.5 - 2 = 1.5)$ hours only one generator worked and produced $(14 \times 1.5 = 21)$ liters of foam).

The total amount of foam that was created is $(69 + 32 + 21 = 154)$ liters).

QUESTION 234

Mike, Jim and Bob are all professional fisherman. Mike can catch 21 fish in one hour, Jim can catch twice as much and Bob can catch 50% more than Jim. If the three started to fish together and after 40 minutes Mike and Bob left, how many fish did the three fishermen catch in one hour?

- A. 64.
- B. 72.
- C. 86.
- D. 98.
- E. 112.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Mike can catch 21 fish in one hour, Jim can catch 42 fish in one hour and Bob can catch $(1.5 \times 42 = 63)$ fish in one hour. 40 minutes is $\frac{2}{3}$ of an hour. After $\frac{2}{3}$ hours they all caught $(21 + 42 + 63) \times (\frac{2}{3}) = 84$ fish. In the next $\frac{1}{3}$ hour that's left, Jim is left alone and so he can catch $(\frac{1}{3} \times 42 = 14)$ fish. The total number of fish that they caught is $(84 + 14 = 98)$.

QUESTION 235

A certain church bell rings the bell twice at half past the hour and four times at the hour plus an additional number of rings equal to what ever time it is. How many rings will the clock make from 6:20 in the morning to 10:10 in the morning?

- A. 32.
- B. 36.
- C. 42.
- D. 46.
- E. 50.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Let's start from the top. The first two rings will be at 6:30 from there there'll be 2 rings ever half past the hour until ten, at 7:30, 8:30 and 9:30. That will

sum up to 8 rings total. The bell will also ring at 7:00 8 rings, at 8:00 9 rings, at 9:00 10 rings and at 10 11 rings. The total number of rings is: $8 + 8 + 9 + 10 + 11 = 46$ rings.

QUESTION 236

A 75-liter solution of cool-drink is made from 8% jasmine water. If 3 liters of jasmine and 12 liters of water were added to the solution, what percent of the solution is jasmine?

- A. 10.3%.
- B. 11.5%.
- C. 10%.
- D. 12.2%.
- E. 12%.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

8% of the solution is made of jasmine, 8% of 70 is 6 liters. If 3 liters of jasmine and 12 liters of water are added, the amount of the jasmine is 9 liters and the percent of the jasmine out of the entire solution is $((9)/(75 + 15) = (9/90) = 10\%$.

QUESTION 237

A 340-liter solution of Kola is made from 88% water, 5% concentrated Kola and the rest is made from sugar. If 3.2 liters of sugar, 10 liter of water and 6.8 liters of concentrated Kola were added to the solution, what percent of the solution is made from sugar?

- A. 6%.
- B. 7.5%.
- C. 9.2%.
- D. 10.5%.
- E. 11%.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$(100\% - 88\% - 5\% = 7\%)$ of the solution is made from sugar, which is $(0.07 \times 340 = 23.8 \text{ liters})$. 3.2 liters of sugar were added to the solution, so there

are 27 liters of sugar in the solution. The total volume of the solution is: $340 + 3.2 + 10 + 6.8 = 360$ liters.
($27 / 360 = 3/40$), which is 7.5% percent.

QUESTION 238

If the sum of six numbers is between 135 and 164, then the average (arithmetic mean) of the six numbers could be which of the following?

- A. 15.4.
- B. 20.5.
- C. 25.5.
- D. 31.25.
- E. 32.5.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Define X as the sum of all the six numbers, $135 < X < 164$. The average of the six numbers, using the average formula, is $X/6$. Divide both sides of the equation by 6: $135/6 < X/6 < 164/6$ $22.5 < X/6 < 27.33$. The average has to be in that range and therefore the only answer could be C.

QUESTION 239

A.S (Most Affordable Speed) is defined as the speed where the fuel consumption of a car is the lowest. The average family car consumes 3 liters of fuel per 36 kilometers at the M.A.S with only one passenger (the driver). A pickup truck consumes twice as much as a family car does. Assuming the fuel consumption of both cars rises by % of the original consumption for each additional passenger, how many km per liter would a pickup truck do if the driver has three additional passengers?

- A. 10 km.
- B. 5.8 km.
- C. 6 km.
- D. 5.4 km.
- E. 4 km.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

This is a question with a lot of dispensable text, it teaches us to focus on relevant information only. A family car consumes 1 liter for 12 Km, a pickup truck consumes twice as much, 1 liter for 6 Km. There are 3 additional passengers so the consumption rises by 10%, .

QUESTION 240

A Super-Jet airplane is flying at an average speed of 500 miles per hour. The average speed of a Turbo- Prop airplane is 15% lower than that of a Super-Jet. How long will it take a Turbo-Prop airplane to fly 950 miles?

- A. 2 hours.
- B. 1 hour and 30 minutes.
- C. 3 hours and 15 minutes.
- D. 2 hours and 24 minutes.
- E. 4 hours.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The average speed of a Turbo-Prop airplane is 85% of that of a Super-Jet airplane, meaning 425 mph.

(15 % is $\frac{3}{20}$ fraction, so $\frac{17}{20} * 500$ is 425).

Traveling at 425 mph, it would take the airplane 2 hours to travel 950 miles.

QUESTION 241

A windmill is taking advantage of strong air currents in order to produce electrical energy. On a typical day the wind speed is around 20 mph and in that speed the windmill produces 800 kw/h (kilowatts per hour). On a stormy day a windmill produces 20% more energy. How much kw/h can three windmills produce in two hours on a stormy day?

- A. 2880.
- B. 4860.
- C. 5780.
- D. 5760.
- E. 6380.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

On a stormy day, a windmill will produce 20% more energy. 20% of 800 is 160, so each windmill will give out 960 kw/h. Three windmills will give $3 \times 960 = 2880$, which is answer (a), but we want two hours so the answer is $2880 \times 2 = 5760$.

QUESTION 242

If $0.22z = 118.8$, then $z =$

- A. 540
- B. 622
- C. 830
- D. 991
- E. 1000

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Because the answer choices are so far apart, you can ballpark this problem. Multiply both sides by 100 to eliminate the decimal points:

$22z = 11880$, divide both sides by 22.

$z = 540$.

QUESTION 243

If $0.45x = 101.25$, then $x =$

- A. 180
- B. 225
- C. 328
- D. 444
- E. 448

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Because the answer choices are so far apart, you can ballpark this problem. Multiply both sides by 100 to eliminate the decimal points:

$45x = 10125$, divide both sides by 45.

$x = 225$.

QUESTION 244

If $0.01z = 9.99$, then $z =$

- A. 99.9
- B. 999.9
- C. 999
- D. 9999.9
- E. 9999

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Because the answer choices are so far apart, you can ballpark this problem. Multiply both sides by 100 to eliminate the decimal points:
 $z = 999$.

QUESTION 245

If $0.06x = 52.2$, then $x =$

- A. 540
- B. 622
- C. 830
- D. 870
- E. 920

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Because the answer choices are so far apart, you can ballpark this problem. Multiply both sides by 100 to eliminate the decimal points:
 $6x = 5220$, divide both sides by 6.
 $x = 870$.

QUESTION 246

A taxi company costs \$2.75 for the first quarter-mile and 12.5 cents for each additional quarter mile. What is the maximum distance you can travel with \$6.50?

- A. 4 miles
- B. $5 \frac{3}{4}$ miles
- C. $6 \frac{1}{2}$ miles
- D. $7 \frac{3}{4}$ miles
- E. $8 \frac{1}{4}$ miles

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Since you spend \$2.75 for the first quarter mile, you have \$3.75 ($6.5 - 2.75$) left to spend on $\frac{1}{4}$ mile intervals. \$3.75 divided by \$.125 equals 30 quarter miles. The 30 miles, plus the initial quarter mile, makes a total of 31 quarter miles. 31 quarter-miles equal 7.75 miles.

QUESTION 247

A photo-mat shop charges \$0.55 for the first photo inside a film, and 40% cents less for each additional photo. How many photos can we develop with \$52.58 if each film contains 36 photos?

- A. 4 films and 12 photos
- B. 5 films and 6 photos
- C. 5 films and 14 photos
- D. 6 films and 4 photos
- E. 6 films and 28 photos

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Each film costs: $0.55 + 35 \times (60\% \text{ of } 0.55 \$ \text{ is } 0.33) = 0.55 + 11.55 = 12.1\$$ per film.

$52.58\$ = 4 \times 12.1\$ + 4.18\$$.

$4.18\$ - 0.55\$ = 3.63\$$. $3.63\$/0.33\$ = 11$ All together gives 4 films + 12 photos.

QUESTION 248

In a fuel station the service costs \$1.75 per car, every liter of fuel costs 0.65\$. Assuming that a company owns 12 cars and that every fuel tank contains 55 liters and they are all empty, how much money total will it cost to fuel all cars?

- A. 320\$
- B. 380\$
- C. 420\$
- D. 450\$
- E. 480\$

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The cost of fuel per car is: $1.75 + 0.65 \times 55 = 37.5$ \$.

There are 12 cars so the sum is $37.5 \times 12 = 450$ \$.

QUESTION 249

In a fuel station the service costs \$1.15 per car, every liter of fuel costs 0.4\$. Assuming that you own 2 sports cars and 2 executive cars and all fuel tanks are empty. How much will it cost to fuel all cars together if a sports car tank is 32 liters and an executive car tank is 75% bigger?

- A. 37.5\$
- B. 75\$
- C. 87.5\$
- D. 94.5\$
- E. 98.4\$

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The cost of fuel per a sports car is: $1.15 + 32 \times 0.4 = 13.95$ \$. The cost of fuel per an executive car is: $1.15 + (32 \times 1.75) \times 0.4 = 1.15 + 56 \times 0.4 = 23.55$ \$. The sum of the fuel price is: $13.95 \times 2 + 23.55 \times 2 = 75$ \$

QUESTION 250

In a fuel station the service costs \$2.05 per car, every liter of fuel costs 0.6\$. Assuming that you fill up 3 mini-vans and 2 trucks, how much money will the fuel cost to all the cars owners total, if a mini- van's tank is 65 liters and a truck's tank is 120% bigger and they are all empty-?

- A. 122.6\$
- B. 128.9\$
- C. 243.7\$
- D. 298.85\$
- E. 312.12\$

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The cost of fuel per mini-van is: $2.05 + 65 \times 0.6 = 41.05\$$. The cost of fuel per an executive car is: $2.05 + (65 \times 2.20) \times 0.6 = 2.05 + 143 \times 0.6 = 87.85 \$$.
The sum of the fuel price is: $3 \times 41.05 + 2 \times 87.85 = 298.85\$$

QUESTION 251

The average (arithmetic mean) of eight numbers is 44.1. If the sum of half of these numbers is 158.4, what is the average of the other half?

- A. 12.8
- B. 24.2
- C. 48.6
- D. 72.1
- E. 96.8

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

This is an average problem, so use the average formula. If the average of 8 numbers is 44.1, we can solve for their sum: $8 \times 44.1 = 352.8$. If four of these numbers total 158.4, then by subtracting 158.4 from 352.8, we get the sum of the other four numbers, 194.4. To find the average of these 4 numbers, we divide their sum by their number: $194.4/4 = 48.6$.

QUESTION 252

Eric, Nick and Archi make contributions to the Society Of Nature Protection in the ratio of 5:3:2.5. If altogether they contribute 5145 Nis, how much more

money does Nick contribute than Archi?

- A. 128 Nis
- B. 212 Nis
- C. 234 Nis
- D. 245 Nis
- E. 288 Nis

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Add the numbers in the ratio $5:3:2.5 = 10.5$. Divide the 5145 by 10.5 and you get the basic Unit = 490 Nis. Nick contributes 0.5 more units than Archi, and since each unit is 490, he contributed 245 Nis more.

QUESTION 253

Of 70 players on a football team, 37 are throwers. The rest of the team is divided so one third are left-handed and the rest are right handed. Assuming that all throwers are right handed, how many right-handed players are there total?

- A. 54
- B. 59
- C. 63
- D. 71
- E. 92

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

70 - 37 are the rest. Meaning that $33/3 = 11$ are left-handed. The overall number of right handed: $37 + 22 = 59$.

QUESTION 254

Irin, Ingrid and Nell bake chocolate chip cookies in the ratio of 9.18: 5.17: 2.05. If altogether they baked a batch of 148 cookies, what percent of the cookies did Nell bake?

- A. 0.125%
- B. 1.25%
- C. 12.5%
- D. 125%
- E. 0.152%

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Add the numbers in the ratio to get $9.18 + 5.17 + 2.05 = 16.4$. You don't need to relate to the number of cookies, it doesn't contribute anything. The relative part of Nell is $2.05/16.4 = 0.125 = 12.5\%$

QUESTION 255

Of 15 players on a basketball team, one third is left handed. Out of the right-handed players there are 80% over 2 meters high. Assuming that out of the left handed players there are 40% players fewer than 2 meters. How many players are there over 2 meters in height?

- A. 6
- B. 7
- C. 8
- D. 9
- E. 10

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Start from the top. One third are left handed (5). Out of the right-handed players there are 8 players over 2 meters. 40% of 5 are 2 players. All together over 2 meters there are 10 players.

QUESTION 256

On a map, 1.5 inches represent 24 miles. How many miles approximately is the distance if you measured 47 centimeters assuming that 1-inch is 2.54 centimeters?

- A. 174.2

- B. 212
- C. 288.1
- D. 296
- E. 282.4

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Dividing the number of centimeters in 2.54 gives you the number of inches: $47/2.54 = 18.5$ inches. 1.5 inches represent 24 miles, 1 inch represents 16 miles.

$(18.5 \text{ inches}) \times (16 \text{ miles}) = 296 \text{ miles.}$

QUESTION 257

On a mechanical gear, 6 teeth represent a movement of 1.2 radians. The gear is connected to a wheel that moves twice as much. If the wheel moved 276 degrees how many teeth did the gear move assuming the each radian is approximately 60 degrees?

- A. 11.5
- B. 14.2
- C. 28.3
- D. 34.7
- E. 41.3

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The wheel moved 276 degrees the gear moved $138 \text{ degrees} / 60 = 2.3$ radians. 1.2 radians are 6 teeth one radian is 5 teeth's. $2.3 \times 5 = 11.5$ teeth movement.

QUESTION 258

A rotameter is a device that measures flow of liquid and gases. When measuring liquid phase flows, 2.5 inches represent 60 liters per minute of liquid. With gas measurements the rotameter moves 50% of the movement he moves with the liquid phase. How many liters of gas passed through the rotameter if it measured 4 inches?

- A. 176
- B. 192
- C. 202
- D. 218
- E. 284

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The rotameter moves 50% of 2.5 meaning 1.25 inches is 60 liters of gas. The rotameter moved 4 inches. $4/1.25 = 3.2 \times 60$ liters is 192 liters measured.

QUESTION 259

Billy worked for three straight hours on his homework questions. If he solved 132 questions in the third hour, which was twice as many as he solved in the second hour, and three times as many questions as he solved in the first hour, how many questions did he solve total?

- A. 242
- B. 312
- C. 424
- D. 525
- E. 622

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$132 / 2$ are 66 questions in the second hour, $132 / 3$ are 44 questions in the third hour.

$132 + 66 + 44 = 242$ questions.

QUESTION 260

V is the volume of a cylinder; the radius of the cylinder is 3.4. The height of the cylinder is 550% more than the radius. Which of the following is true?

- A. $100 < V < 300$
- B. $300 < V < 500$

- C. $500 < V < 700$
- D. $700 < V < 900$
- E. $900 < V < 1100$

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

You can start with the length. Length = 6.5×3.4 is approximately 22. The Volume of the cylinder is the area of its face \times its length.

Area of face = .

V is approximately $36 \times 22 = 792$ and the best answer is D.

QUESTION 261

Two trains are traveling on a collision course. If train A is traveling at a speed of 350 mph and train B is traveling 28% slower, how much time will it take the trains to collide if the initial distance between the two is 1505 miles?

- A. Two hours and 30 minutes.
- B. One hour and 10 minutes.
- C. Two hours and 25 minutes.
- D. Three hours and 15 minutes.
- E. Four hours and 20 minutes.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Train B is traveling at a speed of $0.72 \times 350 = 252$ mph. The two trains are traveling in opposite directions. Thus, the distance should be divided by the sum of their speeds = $252 + 350 = 602$ mph.

$1505 \text{ miles} / 602 = 2.5 = \text{two hours and 30 minutes.}$

QUESTION 262

Two cars are traveling towards each other. If car A is traveling at a speed of 50 mph and car B is traveling 12% slower, how much time will it take the cars to meet if the initial distance between the two is 705 miles?

- A. Six hours and 30 minutes.

- B. Seven hours and 30 minutes.
- C. Eight hours and 20 minutes.
- D. Nine hours and 15 minutes.
- E. Ten hours and 20 minutes.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Car B is traveling at a speed of $0.82 \times 50 = 44$ mph.

The cars are traveling in opposite directions. Thus, the distance should be divided by the sum of their speeds = $50 + 44 = 94$ mph.

$705 \text{ miles} / 94 = 7.5 = \text{seven hours and 30 minutes.}$

QUESTION 263

Tom and Jerry are running on the same road towards each other. If Tom is running at a speed of 2.5 meters per second and Jerry is running 36% slower, how much time will it take them to meet if the initial distance between the two is 50 meters and Tom started running 20 seconds before Jerry did?

- A. 2 minute and 12 seconds.
- B. two minutes.
- C. 44 seconds.
- D. 20 seconds.
- E. 12 seconds.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Jerry is running at a speed of $0.64 \times 2.5 = 1.6$ meters per second. Tom runs alone a distance of $2.5 \times 20 = 50$ meters. Tom caught Jerry off-guard and Jerry didn't even start running.

QUESTION 264

Rain is falling at a rate of 3 centimeters per hour all over Springfield. Somewhere downtown in Springfield a group of pigeons is waiting for the rain to stop. If the rain filled a round puddle the with a base area of 350 square centimeters and a depth of 13.5 centimeters, how long did the pigeons wait for the rain to stop?

- A. 3 hours and 12 minutes.
- B. four hours and 30 minutes.
- C. four hours and 45 minutes.
- D. five hours and 10 minutes.
- E. five hours and 30 minutes.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The volume of the puddle is irrelevant since rain fell all over the city. Thus, you should relate to the depth that fell only. $13.5 / 3 = 4.5$ hours of rain.

QUESTION 265

Ronald is now 4.5 years older than Andrew and third of that amount older than Ingrid. If in 0.5 years, Ronald will be three times older than Andrew, then in 2.25 years what would be Ingrid's divided by Andrew's age multiplied by Ronald's age?

- A. 8.125
- B. 12.5
- C. 12.875
- D. 14.875
- E. 15.225

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Translate piece by piece into numbers. R (Ronald) = A (Andrew) + 4.5.

The second equation: $R = I$ (Ingrid) + 1.5.

The third equation: $R + 0.5 = 3(A + 0.5)$. We have three equations with three variables. Ronald is 6.25, Ingrid is 4.75 and Andrew is 1.75. In 2.25 years, Ronald will be 8.5, Ingrid will be 7 and Andrew will be 4. The answer is: $7 / 4 \times 8.5 = 14.875$.

QUESTION 266

Richard is now 14.5 years older than Arthur and half of that amount older than Sam. If in 2.75 years, Richard will be twice and a half older than Arthur, then in 7 years what would be Arthur's age approximately?

- A. 8
- B. 14
- C. 22
- D. 24
- E. 30

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Translate piece by piece into numbers. R (Richard) = A (Arthur) + 14.5.

The second equation: $R = S$ (Sam) + 7.25.

The third equation: $R + 2.75 = 2.5(A + 2.75)$. We have three equations with three variables. Today Arthur's age is approximately 6.9 (take 7). In 7 years he would be about 14 years old.

QUESTION 267

In 13.5 years Stacy will be as old as Carolyn is now. Thirty two years ago Carolyn was two and a half the age of Stacy. How old will Stacy be a decade from now?

- A. 36
- B. 47
- C. 51
- D. 64
- E. 71

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Translate the data into numbers: s (Stacey) + 13.5 = c (Caroline) and $2.5(s - 32) = c - 32$. From the equations Today Stacy is 41 years old, in a decade from now she will be 51.

QUESTION 268

X years in the future, Zach will be Y years old. Z years in the future, Zach will be how old?

- A. $Z + X + Y$
- B. $Z + X \cdot Y$
- C. $X \cdot Y \cdot Z$
- D. $Y \cdot X + Z$
- E. $2Z + X \cdot y$

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Write the following equations: $Zach + X = Y$ and $Zach + Z = ?$ Put Zach from the first equation and place it in the second one: $Y - X + Z$ is the age in Z years.

QUESTION 269

An investment yielded an interest payment of \$350 each month when the annual interest rate was 9%, what is the amount of the investment that should be invested with an annual interest rate of 8% if We want to gain 15% more each month?

- A. \$60,375
- B. \$50,400
- C. \$41,300
- D. \$32,500
- E. \$25,100

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The new monthly payment should be $1.15 \times \$350 = \402.5 . Now we'll proceed with the formula:

Principal \times percent interest = interest earned

Principle $\times (0.08) \times 1/12 = \402.5 .

Solve for the principal $(402.5 \times 12)/.08 = \$60,375$.

QUESTION 270

An investment gained an interest payment of \$250 each month when the annual interest rate was 8%, how much more should we invest annually if we want to gain 12% more per month with a new annual interest rate of 7.5% ?

- A. \$9,360
- B. \$9,100
- C. \$8,250
- D. \$7,300
- E. \$7,150

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The new monthly payment should be $1.12 \times \$250 = \280 . Now we'll proceed with the formula:
Principal \times percent interest = interest earned

Solve for the principal for the 9% interest: $(250 \times 12)/.08 = \$37,500$, this is what we invested before. Solve for the principal for the 6.5% interest: $(280 \times 12)/.075 = \$44,800$, this is what we should invest with the new interest. $(44800 - 37500 = \$7,300)$ is the amount to be added to the prime payment.

QUESTION 271

Mike earns \$14 per hour and Phil earns \$10.5 per hour. Approximately how much less, as a percentage, does Phil earn than Mike per hour?

- A. 25%
- B. 32.5%
- C. 37%
- D. 37.5%
- E. 40%

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Mike earns $(14 - 10.5) = \$3.5$ more than Phil, that is $3.5/14 = 0.25 = 25\%$.

QUESTION 272

A frustrated greengrocer is trying to sell cucumbers at a price of \$1.5 per Kg. Unfortunately he has no success. The greengrocer gives a discount of 18% on the original price but then the cucumbers are sold too fast so he raises the price again by 10%. At that final price, how many cucumbers can you

buy for \$4.5 assuming that there are 12 cucumbers per Kg and that only a whole number of Kgs are sold?

- A. 25
- B. 34
- C. 40
- D. 46
- E. 48

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$$1.5 \times 0.82 = \$1.23.$$

$$\$1.23 \times 1.1 = 1.353\$$$

$$5 / 1.353 = 4 \text{ Kg and change} = 48 \text{ cucumbers.}$$

QUESTION 273

An air-conditioning unit costs \$470. On December there was a discount for Christmas of 16%. Six months later, the holiday season was over so the company raised the price of the air-conditioning by 16%. How much will an air-conditioning unit cost in November?

- A. \$458
- B. \$470
- C. \$472
- D. \$484
- E. \$491

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Pay attention, when you raise a number by X% and then you reduce X% you don't get the original number again because the second time you took X% off you reduced it from a larger number thus answer A is not the correct one, let's check:

$$470 \times 0.84 = 394.8.$$

$$394.8 \times 1.16 = \text{approximately } \$458.$$

A simpler way to solve this problem is by knowing that the price would be lower than the original price because we increased and decreased the same

amount of percentage.

QUESTION 274

In a rectangular coordinate system, what is the area of a rectangle whose vertices have the coordinates $(-4, 1)$, $(1, 1)$, $(1, -3)$ and $(-4, -3)$?

- A. 16
- B. 20
- C. 24
- D. 25
- E. 30

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

First draw the x and y axes, then plot the points and connect them, right away you can see that the base is 5 units and the height is 4 units. The area of the rectangle is 20.

QUESTION 275

In a rectangular coordinate system, what is the area of a rhombus whose vertices have the coordinates $(0, 3.5)$, $(8, 0)$, $(0, -3.5)$, $(-8, 0)$?

- A. 56
- B. 88
- C. 112
- D. 116
- E. 120

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

First draw the x and y axes, then plot the points and connect them. The area of a rhombus is simply the product of its diagonals divided by 2. The area is $= 16 \times 7 = 112/2 = 56$.

QUESTION 276

A GMAT class has a ratio of girls to boys of 1.5 to 3. If the class has a total of 36 students, how many more girls are there than boys?

- A. 8
- B. 10
- C. 12
- D. 15
- E. 18

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

This is a standard ratio problem. $36 / (1.5 + 3) = 8$.

The number of boys is $8 \times 3 = 24$.

The number of girls is $8 \times 1.5 = 12$.

The difference between the numbers is 12.

QUESTION 277

A Math-club class has a ratio of girls to boys of 1.5 to 4.5. Out of all the boys 16.66% are left-handed, how many left-handed boys are there in the class assuming that there are 24 students all together.

- A. 8
- B. 6
- C. 5
- D. 4
- E. 3

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

This is a standard ratio problem. $24 / (1.5 + 4.5) = 4$.

The number of boys is $4 \times 4.5 = 18$.

The number of girls is $4 \times 1.5 = 6$.

16.66% out of 18 are 3 boys.

QUESTION 278

X is an even number, which of the following is odd?

- A. X^2
- B. $(X + 1)^2$
- C. $(X + 2)^2$
- D. $X^3 + X$
- E. $2X^2$

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The easiest way is to try out a number, let's say $X=2$.

You can see that B is 9, and that is always an odd number.

QUESTION 279

X is an integer, which of the following must be even?

- A. $X(X + 2) + 2$
- B. $X(X + 1) + 1$
- C. $X(X + 1)$
- D. X^2
- E. $X^3 + 1$

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

You don't know whether or not X is even. In answer C you have a multiplication of two consecutive numbers so one of them must be even and an even number multiplied by an odd number is always even.

QUESTION 280

P is divisible by 4. Q is divisible by 3. Which of the following is definitely odd?

- A. $Q(P+1)$
- B. $2P+3Q$
- C. PQ^2
- D. P^2Q^3
- E. None of the above.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

P must be even but Q is either even or odd (3,6,...). None of the following answers are definitely odd although some can be.

QUESTION 281

A and B are integers. If $2A-B = B-A$, than which of the following is true?

- A. $B < A$
- B. $A < B$
- C. A and B are even.
- D. A is even and B is either even or odd.
- E. B is even.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$2A-B = B-A$ $3A = 2B$. Therefore 3A must be an even number and since 3 is odd, A must be even and B can be either even or odd.

QUESTION 282

A is even and B is odd. Which of the following expressions can't be an integer?

- A.
- B.
- C.
- D.

E.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

In this question we are looking for an expression: odd/even, which can't be an integer. In answer A:
The numerator is odd and the denominator is even therefore it can't be an integer.

QUESTION 283

The bus that travels from St. Louis to Chicago and back comes to St. Louis every 4 hours while the bus that travels from St. Louis to Springfield and back comes to St. Louis every 6 hours. If at 12:00 o'clock both buses arrived at St. Louis, at what time will they meet in St. Louis again?

- A. 16:00.
- B. 18:00.
- C. 20:00.
- D. 22:00.
- E. 24:00.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

In order for both buses to meet again, we ought to look for the smallest common factor of 4 and 6, thus 12 hours. After 12 hours one of the buses will complete 3 roundtrips while the other will complete only 2, they will meet at $(12:00 + 12 = 24:00)$.

QUESTION 284

Monica planned her birthday party. She prepared 5 muffins for each of her guests and kept aside two additional muffins in case someone will want extra. After the party, it turned out that one of the guests didn't come but every one of the guests that did come ate six muffins and 3 muffins remained. How many guests did Monica plan on?

- A. 3.
- B. 4.
- C. 5.
- D. 6.

E. 7.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

X is the number of guests that were suppose to show up at the party, and so Monica prepared $5X + 2$ muffins. $(X - 1)$ is the number of guests that did come to the party and the total number of muffins is $6(X - 1) + 3$. The number of muffins that Monica prepared is equal to the total number of muffins and so we can compare the following expressions: $5X + 2 = 6(X - 1) + 3 \rightarrow X = 5$.

QUESTION 285

If $1/3 < A < 2$, which of the following expressions can have the largest value?

- A. $A^2/3$.
- B. A.
- C. $A/2 + 1/3$.
- D. $A + 1/3$.
- E. $A^3 - 4$.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Try the answers for the largest and smallest values A can get. Take $A = 1.9$, answer E will be the largest and so this is the expression that can be the largest among the other expressions.

QUESTION 286

In an isosceles triangle the sum of the sides is 2 inches longer than the base. What is the ratio between the length of the side and the length of the base?

- A. 1.5
- B. 1.
- C. 1.75.
- D. 2.

E. Not enough information.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Try taking the base of the triangle as 1 inch. Both of the sides are 3 inches.

And the portion required is $(1.5 / 1) = 1.5$.

Try taking different numbers, take 10 inches as the length of the base.

The length of both sides is $(10 + 2 = 12$ inches).

The portion required is $(6 / 10)$.

We can see that a randomly pick of two numbers will give two different answers and therefore there is no distinct answer.

QUESTION 287

The distance between West-Town to East-Town is 15 kilometers. Two birds start flying simultaneously towards one another, the first leaving from West-Town at a speed of 4 kilometers per minute and the second bird, leaving from East-Town, at a speed of 1 kilometers per minute. What will be the distance, in kilometers, between the meeting point and West-Town?

- A. 3.
- B. 7.
- C. 10.
- D. 12.
- E. 15.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The ratio between their speeds is 4:1 and so will be the ratio between the distances that they'll pass. The first bird will pass a distance of 12 Km and the second bird will pass only 3Km.

The meeting point will be 12 Km from West-Town.

QUESTION 288

A car traveled from San Diego to San Francisco at an average speed of 48 miles per hour. If the journey back took twice as long, what was the average speed of the trip?

- A. 24.
- B. 32.
- C. 36.
- D. 42.
- E. 44.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Average speed can be found by dividing the total distance by the total time. If the journey back took twice as long then the car traveled at half the speed, thus 24-mph. Take the time the car traveled from San Diego to San Francisco as T , and the time it took to get back as $2T$. The total distance is $48T$ + $24 \times 2T = 96T$, now divide it by the total time, $3T$ to get 32 mph.

QUESTION 289

If "Alfa" is defined as 2 percent of 5 degrees, how many "Alfa's" are there in two circles?

- A. 0.72.
- B. 7.2.
- C. 72.
- D. 720.
- E. 7200.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

"Alfa" is defined as $(0.02 \times 5 \text{ degrees} = 0.1 \text{ degrees})$.

In a circle there are 360 degrees, in two circles there are 720. $(720 \text{ degrees} / 0.1 = 7200 \text{ "Alfa's"})$ in two complete circles.

QUESTION 290

What is the smallest possible common multiple of three integers, all larger than 26?

- A. 27.

- B. 54.
- C. 846.
- D. 19,656.
- E. 21,924.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

All of the integers have to be greater than 26, thus 27 and up. The question didn't mention that they have to be different and so they can all be equal to 27.

The smallest common multiple of 27 is 27 itself.

QUESTION 291

What is the smallest possible common multiple of two integers, both bigger than 260?

- A. 261.
- B. 262.
- C. 524.
- D. 12,542.
- E. 18,244.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

All of the integers have to be greater than 260, thus 261 and up. The question didn't mention that they have to be different from one another and so they can all be equal to 261.

The smallest common multiple of 261 is 261.

QUESTION 292

A customer asks the clerk for a paintbrush and a bucket of whitewash for a total price of B dollars. If the paintbrush costs 200 cents less than twice the price of a bucket of whitewash, what is the price of half a bucket of whitewash in dollars?

- A. $(B + 200)/2$.

- B. $(B + 2)/6$.
- C. $(2B + 200)/3$.
- D. $(B + 2)/3$.
- E. $(B + 2)/6$.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Define W as the price of the bucket of whitewash and P as the price of a paintbrush. You can write the following equations: $P + W = B$ and $P = 2W - 2$.

Notice that 200 cents are translated into 2 dollars.

From the equations we can conclude that $W = (B + 2)/3$.

Therefore the price of half a bucket is $(B + 2)/6$.

QUESTION 293

If 34 boxes of cucumbers in brine cost A dollars, how much will B boxes cost in cents?

- A. $AB/34$.
- B. $17AB/50$.
- C. $34/AB$.
- D. $50AB/17$.
- E. $100AB/17$.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If 34 boxes cost A dollars then one box costs $A/34$ dollars or $100A/34$ cents = $50A/17$.

B boxes will cost $B \times 50A/17 = 50AB/17$.

QUESTION 294

If X boxes of pineapple juice cost 342 cents, how much will Y boxes cost in dollars?

- A. $342Y/X$.

- B. $X/(342Y)$.
- C. $XY/(342)$.
- D. $3.42X/Y$.
- E. $3.42Y/X$.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If X boxes cost 342 cents (or 3.42 dollars), then each box costs $3.42/X$.

Y boxes will cost $3.42Y/X$.

QUESTION 295

Jeremy bought 2Q steaks for W dollars. Jerome buys R steaks for a 50% discount, how much will the steaks cost him in cents?

- A. $50RW/Q$.
- B. $50QR/W$.
- C. $25RQ/W$.
- D. $25RW/Q$.
- E. $RW/(4Q)$.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Jeremy paid W dollars (or 100W cents) for 2Q steaks and therefore each steak cost him $50W/Q$. Jerome has a 50% discount, so every steak costs him $25W/Q$.

Jerome wants to buy R steaks; it will cost him $25RW/Q$.

QUESTION 296

An electrical appliances store sold this month 400% more than the average of all the other months in the year. The sales total for this month was approximately what percent of total sales for this year?

- A. 14%.
- B. 21%.

- C. 31%.
- D. 37%.
- E. 43%.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Plug in 1\$ as the sales for each of the other 11 months. On that special month, the store sold 400% more (400% of 1 is 4), or \$5. The sales of this month relative to the sales of the entire year are $5/(11 + 5)$. $5/16$, which is a bit less than $1/3$ (33%).

QUESTION 297

What is the units' digit of $(9)7(17)3(3)3$?

- A. 3.
- B. 5.
- C. 7.
- D. 8.
- E. 9.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$(17)3(3)3 = (17 \times 3)3 = (51)3 = 51 \times 51 \times 51$ ---> the units' digit is just $1 \times 1 \times 1 = 1$.

We are left with the units' digit of 97.

$(9)7 = 9 \times 81 \times 81 \times 81$ ---> the units' digit is 9.

And therefore the units' digit of the entire expression is 9.

QUESTION 298

A certain factory produces buttons and buckles at a uniform weight. If the total weight of 2 buttons and 2 buckles is one third of 11 buckles and 3 buttons, then the weight of 3 buttons and 2 buckles is how many times that of 5 buckles and 6 buttons?

- A. $7/15$.
- B. $4/9$.

- C. $6/11$.
- D. $5/9$.
- E. $8/15$.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Define B as the weight of a button and K as the weight of a buckle. The total weight of $(2B + 2K)$ is equal to $(11K + 3B)$ $\rightarrow 3B = 5K$ $B = 5K/3$. The question requires the ratio between $(3B + 2K)$ and $(5K + 6B)$.

The first factor is equal to $(5K + 2K = 7K)$.

The second factor is equal to $(5K + 2(5K)) = (15K)$.

The ratio between them is $7:15$ and therefore the first factor is $7/15$ of the second one.

QUESTION 299

In a recent survey, Q people were asked whether they eat after 22:00 O'clock. 25 percent of the people answered positively and 40 percent of the rest were asked, at what time do they get up in the morning. Which of the following expressions represents the number of people who do not eat after 22:00 and were not asked about the time they get up in the morning?

- A. $3Q/20$.
- B. $Q/10$.
- C. $5Q/9$.
- D. $3Q/10$.
- E. $9Q/20$.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$75Q/100$ is the number of people who eat after 22:00. 60% of that number is the number of people who weren't asked upon, when do they get up at the morning.

$$60 \times (75Q/100) / 100 = 45Q/100 = 9Q/20.$$

QUESTION 300

A and B are integers. The expression $(A+1)(B+1)$ is even.

What can be said about A and B?

- A. They are both even numbers.
- B. At least one of them is even.
- C. At least one of them is odd.
- D. They are both odd.
- E. Nothing can be said surly on A and B.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Because the given expression is even, at least one of the phrases in one of the parenthesis must be even therefore either A or B must be odd.

QUESTION 301

In orange county one fifth of the people are gathering mushrooms and one seventh of the people are collecting apples. What can be the number of people in Orange County?

- A. 60.
- B. 42.
- C. 85.
- D. 140.
- E. 252.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The answer must be a number that is divisible by both seven and four.
The only possible number is 140.

QUESTION 302

Danny can divide his herd into 5 equal parts and also to 6 equal parts, but not to 9 equal parts. What could be the number of cows Danny has in his herd?

- A. 155.
- B. 336.
- C. 180.
- D. 120.
- E. 456

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The number of cows is divisible by 5 and 6 but not by 9. Meaning it must end with a 5 or a 0 and be divisible by 3 (the sum of its digits is divisible by 3). That leaves answers C and A only. However, 180 is also divisible by 9 and is ruled out.

QUESTION 303

The number of bunnies in Peter's yard increases by 4 times every week. How many weeks will it take for the number of bunnies to be divisible by 8 assuming that he started out with 3 bunnies?

- A. 1.
- B. 2.
- C. 3.
- D. 4.
- E. Never.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

In the beginning he has 3, one week later he has 12 and two weeks later he has 48 and that can be equally divided by 8.

QUESTION 304

If $X = 23 \times 52 \times 7$, then the expression $X/8$ is not divisible by:

- A. 1.
- B. 2.
- C. 5.

- D. 7.
- E. 25.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

From the given expression we learn that $X/8 = 25 \times 7$, which is not divisible by 2.

QUESTION 305

The remainder when dividing the expression $(X + Y)$ by 5 is 4. The remainder of X divided by 10 is 2. What is the remainder of Y divided by 5?

- A. 1.
- B. 2.
- C. 3.
- D. 4.
- E. 5.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Plug in numbers that fit the conditions. $(X+Y) = 19$ and so $19/5$ gives a remainder of 4. $X = 12$ and so $12/10$ gives a remainder of 2. Therefore Y is 7. $7/5 = 1$. The remainder is 2.

QUESTION 306

Q is a prime number larger than 10. What is the smallest positive number (except 1) that $3Q$ can be equally divided by?

- A. $3Q$.
- B. Q
- C. 3
- D. $Q+3$
- E. $2Q$

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

3Q is a prime number so it can be divide equally by 3Q, by 1 and by the components 3 and Q. The smallest number is 3.

QUESTION 307

A can be divided by 11 with no remainder. Which of the following expressions could be divided by 11 leaving a remainder of 1?

- A. A-20.
- B. A-12.
- C. A-9.
- D. A-10.
- E. A-13.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$A/11=X$, so $A=11X$. Now change A in answer D with 11X to get: $11X-10$. Plug in numbers in X to find out if it could leave a remainder of 1 when divided by 11.

Let's try $X=2$ and $A = 22$. In expression D: $22-10=12$.

$12/11 = 1$ with a remainder of 1. try plugging the same number (2) to each of the expressions to find the right answer.

QUESTION 308

Eggs are sold in packages of six or eleven only. If Doris bought 70 eggs exactly, what could be the number of large packs Doris bought?

- A. 6.
- B. 2.
- C. 3.
- D. 5.
- E. 4.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If she bought 2 large packs (22 eggs) then she has 48 eggs left. 48 eggs can be equally divided into eight boxes of 6.

QUESTION 309

A, B, C are three consecutive positive integers ($A > B > C$).

What is the value of the expression $2A + B + 3C$?

- A. $6A + 7$.
- B. $5A + 1$.
- C. $5A - 1$.
- D. $6A - 5$.
- E. $6A - 7$.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

A different way is by expressing B and C according to A. $C = A - 2$, $B = A - 1$. So the expression becomes: $2A + (A - 1) + 3(A - 2) = 6A - 7$.

QUESTION 310

Q, R, S, and T are four consecutive positive numbers. Which of the following expressions must be odd?

- A. $QR + ST$.
- B. $Q + R + S + T$.
- C. $Q^2 + S^3$.
- D. $Q^2 + R^2$.
- E. $Q^2 + 2R$.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

You can ignore the powers since odds and evens remain as they were under powers. Q and R are consecutive numbers and therefore one of them is even and the other one is odd. The result of the sum of an even number and an odd number must be an odd number.

QUESTION 311

X, Y and Z are consecutive numbers ($X > Y > Z$). $X + 2Y + 3Z = 5Y + 4$.
What is Z?

- A. 5.
- B. 6.
- C. 3.
- D. 4.
- E. 2.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Use the answers to back solve.

$$X + 2Y + 3Z = 5Y + 4 \implies X + 3Z = 3Y + 4$$

Let's try the first answer: $Z = 5$, so $Y = 6$ and $X = 6$.

Let's check the equivalence: $7 + 15 = 22 = 18 + 4$.

QUESTION 312

The sum of 3 consecutive numbers is definitely:

- A. Positive.
- B. Divisible by 2.
- C. Divisible by 3.
- D. Divisible by 4.
- E. Divisible by 5.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

This is a rule: The sum of 3 consecutive integers is divisible by 3. For example take $3 + 4 + 5 = 12$.

QUESTION 313

Which of the following expressions is independent to variable X?

- A. $(4X - 3)/(X - 3)$.
- B. $X(1 + 2X)/2$.
- C. $4X - 1 - 4(1 - X)$.
- D. $(X + 2)^2 - X^2$.
- E. $X/(4X) + 4X/4$.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Simplify all the expressions to see where X disappears.

Answer B: $X(1+2X)/2 = X \cdot \frac{1}{2} - X = -1/2$ and this answer as you can see is not dependent on the variable X.

QUESTION 314

If $(A + 2)^2 = (A + 5)^2$, what could be the value of A?

- A. 1.5.
- B. -2.5.
- C. -3.5.
- D. 2.5
- E. 3.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Plug in the answers to back solve this question. Input $A = -3.5$ and you'll get $(-1.5)^2 = (1.5)^2$

QUESTION 315

If $A^2(B + C) = 20$, (A , B and C are all integers bigger than 1), what is the value of the expression $(B + C - A)$?

- A. 1.
- B. 2.
- C. 3.
- D. 4.
- E. 9.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Because they are all integers bigger than 1, the only multiplication can be $4 \times 5 = 20$. Because A is an integer, A^2 can't be 5 therefore its 4 ($A = 2$). $A = 2$
 $B + C = 5$. $B + C - A = 5 - 2 = 3$.

QUESTION 316

If $(A - B - C + D = 13)$ and $(A + B - C - D = 5)$, what is the value of $(B - D)^2$?

- A. 16.
- B. 64.
- C. 8.
- D. 4.
- E. 12.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Subtract equation 2 from equation 1 and you'll get: $-2B + 2D = 8 \rightarrow (B - D)^2 = 16$.

QUESTION 317

If $(A + B) = 4$, $(B + C) = 9$ and $(C + D) = 3$, what is the value of $(A + D)$?

- A. 16.

- B. 2.
- C. 7.
- D. -2.
- E. 8.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Take equation 1 + equation 3 - equation 2 and you'll get $4 + 3 - 9 = -2$.

QUESTION 318

If $X^2 + Y^2 = A + 3$, $XY = 7$ and $(X + Y)^2 = 25$, what is the value of A?

- A. 11.
- B. 6.
- C. 8.
- D. 5.
- E. 4.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$A + 3 = X^2 + Y^2 = (X + Y)^2 - 2XY = 25 - 7 \times 2 = 11$ $A = 8$.

QUESTION 319

If $4 - X < (2 - 5X)/3$, which of the following is correct?

- A. $X < -5$.
- B. $X > -5$.
- C. $X > 5$.
- D. $-5 < X < 0$.
- E. $0 < X < 5$.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Multiply both sides by 3: $12 - 3X < 2 - 5X$ $X < -5$.

QUESTION 320

If $Y < X$ and $XM < YM$, what must be true?

- A. $M < X$.
- B. $M < Y$.
- C. $X < 0$.
- D. $M < 0$.
- E. $Y < 0$.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If $Y < X$, multiply both sides by M and see that M must be negative since it changed the sign of the inequality. Remember that multiplying both sides of an inequality by a negative number reverses the direction of the inequality sign.

QUESTION 321

If $X = (Y/Z)$, $(-1 < Z < 0)$ and $4 < Y$, which of the following is correct?

- A. $X > 4$.
- B. $0 < X < 4$.
- C. $-4 < X < 0$.
- D. $X < -4$.
- E. $X < -20$.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Plug in numbers that fit the conditions of the question, $Y=5$; $Z = -1/2$ $X = 5/(-1/2) = -10$.

QUESTION 322

If $(B+A < B \ A < A \ B)$, which of the following is correct?

- A. $A < B < 0$.
- B. $B < A < 0$.
- C. $B < 0 < A$.
- D. $0 < B < A$.
- E. $B > A > 0$.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Divide the equation in to two: $(B+A < B \ A)$ and $(B \ A < A \ B)$. From the first one: $A < 0$. From the second one: $A > B$. Therefore B is the answer.

QUESTION 323

A is an integer. Which of the following expressions must be even?

- A. $A(A+2) - 1$.
- B. $A(A - 1) + 1$.
- C. $(A+1)(A+2)$.
- D. $(A - 1)(A + 3)$.
- E. $A^2 - 1$.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Answer C is a multiplication of two consecutive numbers, therefore one of them must be even, and an even number multiplied by a different number is

an even number.

QUESTION 324

X and Y are integers. If $(4X + 3Y = 3Y - X)$, which of the following is true?

- A. X is even.
- B. X is odd.
- C. Y is even.
- D. Y is odd.
- E. None of the above.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$4X + Y = 3Y - X \rightarrow 3X = 2Y$. The right side of the equation is definitely even. Therefore X must also be even since it is multiplied by an odd number (3).

QUESTION 325

To a prime number bigger than 2, 1 is added, the result is multiplied by three. What can be the result of these actions?

- A. 51.
- B. 54.
- C. 43.
- D. 41.
- E. 53.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

A prime number bigger than 2 must be odd, adding one to that number gives you an even number, multiply that number by 3 and again the result is even. The only even answer is B.

QUESTION 326

A seven-digit phone number is divisible by 3. After adding the two digits of the area code the number is not divisible by 3, which of the following cannot

be the area code?

- A. 06.
- B. 02.
- C. 07.
- D. 04.
- E. 05.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Adding one number that is divisible by 3 to another, the result will still be a number that is divisible by 3; the only number among the answers that is divisible by 3 is 06.

QUESTION 327

In a Greek restaurant there is a custom to break plates during celebrations. If after 8 celebrations there were only 6 plates left, which of the following could be the original number of plates before the celebrations?

- A. 30.
- B. 32.
- C. 34.
- D. 36.
- E. 40.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Take answer A: start with 30 plates; take out 6 so you have 24.
24 is divisible by 8 (celebrations).

QUESTION 328

If a , b , c and d are consecutive integers ($a < b < c < d$).
What is the value of $(d+c)$ $(b+a)$?

- A. 1.
- B. 2.
- C. 3.
- D. 4.
- E. 0.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Plug in some numbers. Try $a=1$, $b=2$, $c=3$ and $d=4$.

$(d+c) - (b+a) = 7 - 3 = 4$. It will work with any number since the difference between any two consecutive integers is always 1.

QUESTION 329

A, B and C are consecutive integers. If $X = (A \times B \times C)/2$, what can be said about X?

- A. X is even.
- B. X is divisible by 3.
- C. X is divisible by 5.
- D. X is positive.
- E. X is a fraction.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

A product of three consecutive integers is divisible by 6, therefore when divided by 2 it is still divisible by 3.

QUESTION 330

If A, B and C are consecutive integers ($A < B < C$) and $6A - 4B = A$, what is the value of C?

- A. 6.
- B. 5.

- C. 4.
- D. 3.
- E. 2.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

B is the number following A, thus $6A - 4(A+1) = A \rightarrow A = 4 \rightarrow C = 6$.

QUESTION 331

A cup can hold one third of the amount a bowl can hold. A pot can hold six times more than a cup. How many pots can be filled with a liquid that takes up 6 bowls?

- A. 1.
- B. 2.
- C. 3.5.
- D. 4.
- E. 5.5.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Try some numbers. One cup can hold 1 liter one bowl can hold 3 liters, a put can hold 9 liters.
6 bowls hold 18 liters and that can fill up two pots.

QUESTION 332

Michael, Steve and Tyler shared a box of cookies. Michael ate $\frac{1}{8}$ of the cookies, Steve ate one half and Tyler ate 150 more cookies than Michael. If no cookies remain in the box, how many cookies were in the box?

- A. 1200.
- B. 600.
- C. 800.

D. 400.

E. 550.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The fastest way is to try the answers, take 600. Michael ate $(600/8)$ 75 cookies, Steve ate 300 and Tyler ate 225. Adding the numbers and you'll get 600 cookies again.

QUESTION 333

The price of a pasta box in the neighborhood grocery store is \$7; the price of a pasta box in the market is \$5. A bus ticket to the market costs \$4.70 (one way). What is the minimum number of pasta boxes that must be bought so the trip would be economically worthwhile?

A. 5.

B. 6.

C. 3.

D. 4.

E. 7.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The price difference between the two places is $(7 - 5) = \$2$ per box. The bus ride back and Forth is \$9.4. If he buys at least 5 boxes the trip to the market will be worthwhile.

QUESTION 334

Following an increase in prices, the price of a candy box was 10 pounds and the price of a can of soda was 6 pounds. If the price of a candy box was raised by 25%, and the price of a can of soda was raised by 50%. What was the price of a box of candy plus a can of soda before prices were raised?

A. 11.

B. 12.

C. 13.

- D. 14.
- E. 14.5.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

For the candy box, 10 pounds is 125%; therefore the original price was 8 pounds. The same thing goes with the soda, 6 pounds is 150%, and therefore the original price was 4. The price of both products together was 12p before the rise.

QUESTION 335

In a chocolate store, all chocolates are either vanilla or cocoa flavored only. 10% of the chocolates are cocoa flavored, 90% of the rest are squashed. What percentage of the chocolates are both vanilla flavored and not squashed?

- A. 1%
- B. 5%
- C. 9%
- D. 10%
- E. 2%

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Pick a number of chocolates; it is best to take 100 as an example. 10 are cocoa, 90% of the rest ($0.9 \times 90 = 81$) are squashed. That means that only 9 are both vanilla flavored and not squashed.

QUESTION 336

Z is 120% of Y. X is smaller than Z by 80%. What percentage is X of Y?

- A. 96%
- B. 24%
- C. 50%

D. 40%

E. 45%

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Pick numbers: $Y=100 \rightarrow Z=120 \rightarrow X = 0.2 \times 120 = 24$.

$X/Y = 24\%$

QUESTION 337

A baker sold all of his donuts for a total amount of 216 pounds. If on each donut the baker made a profit of 8% of the cost, how much did it cost the baker to make all the donuts?

A. 210.

B. 200.

C. 190.

D. 180.

E. 170.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If on each donut he made a profit of 8% then he made the same profit on all of his donuts. That means that 216 pounds are 108% of the cost, and 100% is 200 pounds.

QUESTION 338

The average age of Eric and George is 10 years smaller than the average age of Martha and Bella. If Martha is six years older than Eric, how much older is Bella from George?

A. 2.

B. 8.

C. 10.

D. 12.

E. 14.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Write the equation: $(\text{Eric} + \text{George})/2 - 10 = (\text{Bella} + \text{Martha})/2$ $\text{Eric} + \text{George} + 20 = \text{Bella} + \text{Martha}$, The girls are 20 years older than the boys, if one is older only by 6 than the other one has to be older by 14.

QUESTION 339

The grade point average of the entire class is 90. If the average of one third of the class is 96, what is the average of the rest?

A. 92.

B. 88.

C. 89.

D. 86.

E. 87.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Choose a representative number of students, 3 for example. Use the average formula: $(96 + 2X)/3 = 90 \rightarrow 2X = 174 \rightarrow X = 87$.

QUESTION 340

In a workshop there are 4 kinds of beds, 3 kinds of closets, 2 kinds of shelves and 7 kinds of chairs. In how many ways can a person decorate his room if he wants to buy in the workshop one shelf, one bed and one of the following: a chair or a closet?

A. 168.

B. 16.

C. 80.

D. 48.

E. 56.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

You must multiply your options to every item. $(2 \text{ shelves}) \times (4 \text{ beds}) \times (3 \text{ closets} + 7 \text{ chairs}) = 80$ possibilities.

QUESTION 341

In how many combinations can we choose 2 students out of 10 if each student is needed to fill a different roll in the student's council?

- A. 110.
- B. 45.
- C. 55.
- D. 90.
- E. 100.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

For the first roll there are 10 free students, for the second roll there are only 9 left. Therefore we have (10×9) 90 combinations total.

QUESTION 342

Three people are to be seated on a bench. How many different sitting arrangements are possible if Erik must sit next to Joe?

- A. 2.
- B. 4.
- C. 6.
- D. 8.
- E. 10.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Treat the two who must sit together as one person. You have two possible sitting arrangements. Then remember that the two that sit together can switch places. So you have two times two arrangements and a total of four.

QUESTION 343

How many 3-digit numbers satisfy the following conditions: The first digit is different from zero and the other digits are all different from each other?

- A. 648.
- B. 504.
- C. 576.
- D. 810.
- E. 672.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

For the first digit you have 9 options (from 1 to 9 with out 0), for the second number you have 9 options as well (0 to 9 minus the first digit that was already used) and for the third digit you have 8 options left.

So the number of possibilities is $9 \times 9 \times 8 = 648$.

QUESTION 344

Barbara has 8 shirts and 9 pants. How many clothing combinations does Barbara have, if she doesn't wear 2 specific shirts with 3 specific pants?

- A. 41.
- B. 66.
- C. 36.
- D. 70.
- E. 56.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

There are $(8 \times 9) = 72$ possibilities of shirts + pants. $(2 \times 3) = 6$ Of the combinations are not allowed.
Therefore, only $(72 - 6) = 66$ combinations are possible.

QUESTION 345

In jar A there are 3 white balls and 2 green ones, in jar B there is one white ball and three green ones. A jar is randomly picked, what is the probability of picking up a white ball out of jar A?

- A. $2/5$.
- B. $3/5$.
- C. $3/10$.
- D. $3/4$.
- E. $2/3$.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The probability of picking the first jar is $\frac{1}{2}$, the probability of picking up a white ball out of jar A is $\frac{3}{3+2} = \frac{3}{5}$. The probability of both events is $\frac{1}{2} \times \frac{3}{5} = \frac{3}{10}$.

QUESTION 346

The probability of pulling a black ball out of a glass jar is $1/X$. The probability of pulling a black ball out of a glass jar and breaking the jar is $1/Y$. What is the probability of breaking the jar?

- A. $1/(XY)$.
- B. X/Y .
- C. Y/X .
- D. $1/(X+Y)$.
- E. $1/(X-Y)$.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Let Z be the probability of breaking the jar, therefore the probability of both events happening is $Z \times (1/X) = (1/Y)$. $Z = X/Y$.

QUESTION 347

An ant walks an average of 500 meters in 12 minutes. A beetle walks 15% less distance at the same time on the average. Assuming the beetle walks at her regular rate, what is its speed in km/h?

- A. 2.215.
- B. 2.5.
- C. 2.775.
- D. 3.2.
- E. 3.5.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

A beetle moves ($0.85 \times 500 = 425$ meters) in 12 minutes that is equal to 0.425 Km in $1/5$ of an hour.
The speed in the right units is $0.425 \times 5 = 2.125$ Km/h.

QUESTION 348

A car was driving at 60 Km/h for 20 minutes, and then at 90Km/h for another 40 minutes. What was its average speed?

- A. 80.
- B. 75.
- C. 70.
- D. 65.
- E. 54.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The average speed is equal to: $(\text{Total distance})/(\text{Total time}) = (60 \times 1/3 + 90 \times 2/3)/1 = 80$ Km/h.

QUESTION 349

The distance from Steve's house to work is 30 Km. On the way back Steve drives twice as fast as he did on the way to work. Altogether, Steve is spending 6 hours a day on the roads. What is Steve's speed on the way back from work?

- A. 10.
- B. 20.
- C. 5.
- D. 14.
- E. 15.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Steve's speed on the way back is double the speed to work therefore it takes him half the time to return home ---> Divide 6 hours by 1:2 ratio, the time it takes him to get home is 2 hours and the time driving to work is 4 hours. 30 Km in 2 hours is 15 Km per hour.

QUESTION 350

The running speed of a horse is three times faster than the jogging of a donkey. If a horse is running for 4 hours and a donkey is jogging for 3 hours, what is the horse's speed (in Km/h) if the sum of their distances is 45 Km?

- A. 15.
- B. 9.
- C. 3.
- D. 12.
- E. 8.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

X is the donkey's speed and 3X is the horse's speed. The total amount of distance is Equal to 45 and to $3X \times 4 + X \times 3 = 15X$ ---> $X = 3$, the speed of a horse is 9.

QUESTION 351

Two ants are moving from their farms towards each other. Ant A is moving at a speed of 9 Cm per hour and ant B is moving at a speed of 6 Cm per hour. If the farms are 60 Cm away from each other, what will be the distance ant A travels until meeting ant B?

- A. 18.
- B. 24.
- C. 36.
- D. 42.
- E. 48.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The ants are moving towards each other, therefore adding their speeds will represent the speed that they are moving towards one another. $60 \text{ Cm} / (9 + 6) = 4$ hours. The distance that ant A will travel in 4 hours is $4 \times 9 = 36 \text{ Cm}$.

QUESTION 352

At 12:10 o'clock Bill leaves point A towards point B at a speed of 30 Km/h. At 13:40 o'clock Richi leaves from the same point towards point B also, but at a speed of 60 Km/h. At what time will Richi passes over Bill?

- A. 14:40.
- B. 15:10.
- C. 16:10.
- D. 15:40.
- E. 15:30.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

At 13:40, Bill has already moved $(30 \times 1.5) 45 \text{ Km}$.

Their relative speed is $(60 - 30) 30 \text{ Km/h}$; therefore it would take $(45 / 30) 1.5$ hours to close the gap between the two. $13:40 + 90$ minutes are 15:10.

QUESTION 353

James can eat 25 marshmallows in 20 minutes. Dylan can eat 25 in one hour.

In how much time will the two eat 150 marshmallows?

- A. 40 minutes.
- B. 1 hour and 30 minutes.
- C. 1 hour.
- D. 1 hour and 40 minutes.
- E. 2 hours and 15 minutes.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Calculate each of their output in one hour: James can eat 75 and Dylan can eat only 25. Together they can eat 100 marshmallows in 1 hour. It would take those 1.5 hours to eat 150 marshmallows.

QUESTION 354

A wolf eats 5.5 Kg of meat in 2 days. A baby tiger eats 3 Kg of meat in 4 days.
How much meat can the two combined eat in three days?

- A. 10.
- B. 8.
- C. 9.
- D. 7.
- E. 6.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

A wolf eats 2.25 Kg a day; a baby tiger eats 0.75 Kg a day. Together they eat 3 Kg of meat every day, in three days they will eat 9 Kg of meat.

QUESTION 355

20 beavers, working together in a constant pace, can build a dam in 3 hours. How many hours will it take 12 beavers that work at the same pace, to build the same dam?

- A. 5.

- B. 2.
- C. 8.
- D. 4.
- E. 6.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

20 beavers worked 3 hours; therefore 60 hours of work were needed to build the dam. $60 \text{ hours} / 12 \text{ beavers} = 5 \text{ hours}$ of work to complete the same dam.

QUESTION 356

B and A are consecutive numbers. If $A + B + X = 15$ then what is true about X?

- A. It can be equally divided by 5.
- B. It can be equally divided by 3.
- C. Positive.
- D. Even.
- E. Odd.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$A + B$ is an odd number; in order for the sum to be equal to 15 X must be an even number.

QUESTION 357

A and B are numbers between 0 and 9. When multiplying 56 by another number the result is 1AB. which of the following can represent A?

- A. 8.
- B. 2.
- C. 6.

D. 4.

E. 5.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

We have two choices: $56 \times 2 = 112$ or $56 \times 3 = 168$.

Therefore A could be 1 or 6. The answer is $A = 6$.

QUESTION 358

Q and R are numbers between 0 and 9. When multiplying 71 by another double-digit number the result is 7PQ. Which of the following could represent Q?

A. 1.

B. 8.

C. 3.

D. 5.

E. 4.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

We have two choices: $71 \times 10 = 710$ or $71 \times 11 = 781$.

Therefore Q can be 0 or 1. The answer is A.

QUESTION 359

A and B are numbers between 1 and 9. What is ABAB/AB?
(AB is a two-digit number and ABAB is a 4-digit number).

A. 11

B. BAB

C. 101

- D. AB
- E. 100.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Plug in numbers: $A = 1$, $B = 2$ $AB = 12$,
 $ABAB = 1212$. $1212/12 = 101$.

QUESTION 360

V, W, X, Y and Z are numbers between 0 and 9.

If $XYZ / 15 = WV$ and $V-W=X$ (WV is a 2 digit number, XYZ is a 3 digit number), which of the following numbers can represent XYZ ?

- A. 321
- B. 215
- C. 633
- D. 570
- E. 414

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

We see that XYZ should be equally dividable by 15, or by 5 and 3.
The only number that fits those conditions is 570.

QUESTION 361

What is the sum of squares of the first two positive odd integers if the sum of squares of the first two positive even integers is X ?

- A. X .
- B. $X/3$.
- C. $X/2$.
- D. $X/6$.

E. $3X/4$.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The squares of the first two odd numbers are: $1^2 + 3^2 = 10$. The squares of the first two even numbers are: $2^2 + 4^2 = 20$.

QUESTION 362

A carousel spins at a rate of $\frac{1}{2}$ a round per second. If a point on its circumference is located 0.5 meters from the center of rotation, how many times approximately will this point reach its starting point in two minutes?

- A. 25.
- B. 30.
- C. 60.
- D. 120.
- E. 180.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If the carousel spins half a turn in one second then it spins once every two seconds. In two minutes there are 120 seconds and therefore the point will reach its starting point ($120 / 2 = 60$) times, no matter how far it is from the center of the circle.

QUESTION 363

There are 7 players in a bowling team with an average weight of 85 Kg. If two new players join the team, one weighs 110 Kg and the second weighs 60 Kg, what will be the new average weight?

- A. 75 Kg.
- B. 80 Kg.
- C. 85 Kg.
- D. 90 Kg.
- E. 92 Kg.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The trick to this question is to notice that the average weight of the two new players is exactly 85 Kg and so when they join the team, the average weight stays the same.

QUESTION 364

The number of hats that Sarah owns is 5 times bigger than the number Nicky owns. If Sarah gives 6 hats to Nicky, they will have the same number of hats. How many hats does Sharon own now?

- A. 5.
- B. 2.
- C. 3.
- D. 4.
- E. 6.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Let X be the number of hats that Nicky owns, Sarah owns 5X.

$$5X - 6 = X + 6 \quad X = 3.$$

QUESTION 365

Jason washes 3 plates after each and every diner. After how many dinners will Jason wash the 26th plate?

- A. 10.
- B. 9.
- C. 8.
- D. 7.
- E. 6.

Correct Answer: B

Section: Problem-Solving Questions**Explanation****Explanation/Reference:**

Explanation:

Only after he finishes each dinner he washes three plates. So after his 8Th dinner he'll finish the 24Th plate and only after the 9Th dinner he'll wash plate's number 25, 26 and 27.

QUESTION 366

Arnold and Danny are two twin brothers that are celebrating their birthday. The product of their ages today is smaller by 9 from the product of their ages a year from today. What is their age today?

- A. 7.
- B. 2.
- C. 9.
- D. 4.
- E. 5.

Correct Answer: D

Section: Problem-Solving Questions**Explanation****Explanation/Reference:**

Explanation:

Back solve using the answers. Take the age 4.

$4 \times 4 = 16$. $16 + 9 = 25$. And in one year they'll be 5 so $5 \times 5 = 25$.

QUESTION 367

Brian got in his latest test a grade 3 times higher than he anticipated. In spite of that, he decided to appeal. After the appeal he got 30 points lower than the original grade but still the grade was 30 points higher than his anticipation. What was the grade Brian anticipated?

- A. 15.
- B. 20.
- C. 30.
- D. 25.
- E. 35.

Correct Answer: C

Section: Problem-Solving Questions**Explanation**

Explanation/Reference:

Explanation:

The grade Brian anticipated is x . The grade that he really got was $3x$. After the appeal he got $3x - 30$ that was still $x + 30$. Therefore $x = 30$.

QUESTION 368

Steve's monthly income is bigger by \$4,000 than John's salary. If they both earned (together) \$144,000 in one year, what is John's monthly income?

- A. \$1,000.
- B. \$2,000.
- C. \$3,000.
- D. \$4,000.
- E. \$5,000.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Steve every month: $x + 4,000$.

Steve and John together every month: $x + x + 4,000 = 2x + 4,000$. Steve and John in a year: $12(2x + 4,000) = 144,000$ $x = 4,000$.

QUESTION 369

The value of a stock is X dollars. On Sunday the stock's value grew by half of its value, but on Monday its value dropped to a third of its new value. What is the stock's value at the end of Monday?

- A. X .
- B. $X/2$.
- C. $2X/3$.
- D. $X/3$.
- E. $X/4$.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Let's say that the original value of the stock was 100.

After Sunday its value was 150, after Monday its value was 50 thus one half of its original value.

QUESTION 370

Heather has 35 stamps in her stamp collection. The stamps are divided into three groups: old, new and foreign. The number of stamps in the old group is one half of the number of stamps in the new group and one seventh of the total amount of stamps. How many foreign stamps does Heather have?

- A. 21.
- B. 20.
- C. 15.
- D. 7.
- E. 18.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If the number of old stamp is $\frac{1}{7}$ of the total amount then there are 5 old stamps. Five old stamps are $\frac{1}{2}$ of the new ones so there are 10 new stamps, therefore there are $(35 - 10 - 5 = 20)$ foreign stamps.

QUESTION 371

The numbers of pizza slices that are sold in Joey's Pizza are only in quantities of 5 and 8 slices per customer. How many slices cannot be bought?

- A. 42.
- B. 33.
- C. 22.
- D. 20.
- E. 38.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Check every answer.

$$42 = 2 \times 5 + 8 \times 4.$$

$$33 = 5 \times 5 + 8.$$

$$20 = 4 \times 5.$$

$$38 = 5 \times 6 + 8.$$

The only a number which cannot be bought is 22.

QUESTION 372

Elizabeth is interested in dividing the rooms in the house among the family. Unfortunately, they do not divide equally. It turns out that in order for the rooms to be dividable, Elizabeth has to build two more rooms and kick out one of the family members. Which of the following can describe the number of the initial rooms in the house and the initial number of family members (in the order Rooms, family)?

- A. 20; 8.
- B. 30; 9.
- C. 15; 6.
- D. 10; 5.
- E. 22; 10.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

First we can eliminate answers where the number of rooms can be divided by the number of people, such as answer D.

We are looking for an answer that if you subtract 1 from the right and add 2 to the left, the left number will be divisible by the right number.

The only answer that fits this description is B. $(30 + 2) / (8) = 4$.

QUESTION 373

In a hair cut competition, the number of blonde girls is three times bigger than the number of brown haired girls, and the number of brown haired girls is twice the number of red haired girls. Assuming that there is no other hair color, what is the proportion of the brown haired girls?

- A. $\frac{2}{3}$.
- B. $\frac{4}{9}$.
- C. $\frac{1}{3}$.
- D. $\frac{5}{9}$.
- E. $\frac{2}{9}$.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Pick a number for the red haired girls: 1.
The number of brown haired girls is twice as much, thus 2.
The number of blondes is three times as much, thus 6.
The total number of girls is 9 and the brown ones are 2 out of 9.

QUESTION 374

In store A there are 10 pairs of pants for every 40 store B has. The price ratio between the pants in store B and the pants in store A is 3:4. If all the pants were sold in both places until the stock ran out, what is the ratio between the total amount stores A earned to the total amount store B earned?

- A. 3:16.
- B. 2:3.
- C. 1:3.
- D. 3:4.
- E. 2:5.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Plug in numbers. Pants in store A cost \$3 and in Store B \$4. In Store A they sold 10 pairs so they earned \$40, in store B they earned (40 x 3) \$120. The ratio between the money earned is 1 to 3.

QUESTION 375

Chris has 100 gold bars and 60 bronze bars. After replacing 10 gold bars with bronze bars, he had an equal amount of gold and bronze bars. The price ratio between a gold and a bronze bar is?

- A. 2:3.
- B. 1:2.
- C. 1:3.
- D. 3:4.
- E. 2:5.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

After replacing 10 gold bars into bronze ones he had 90 of each thus 10 gold bars are worth 30 bronze ones, and this is their price ratio.

QUESTION 376

Car A travels at three times the average speed of car B. Car A started to travel at 12:00 o'clock, car B started to travel at 16:00 o'clock. What is the speed of car B (in Km/h) if the total distance that both cars traveled until 18:00 was 1000 Km?

- A. 10.
- B. 25.
- C. 30.
- D. 38.
- E. 50.

Correct Answer: E

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The speed of car B is X; the speed of car A is 3X.

Car A traveled $3X \times 6 \text{ hours} = 18X \text{ Km}$.

Car B traveled $X \times 2 \text{ hours} = 2X \text{ Km}$.

$1000 = 20X \rightarrow X = 50 \text{ Km/h}$.

QUESTION 377

Liz drove from point A to point B at 40 Km/h. On her way back she drove at 50 Km/h and therefore her way back lasted one hour less. What is the distance (in Km) between A and B?

- A. 150.
- B. 200.
- C. 600.
- D. 450.
- E. 500.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The length of the road from A to B is $40 \times X$, where X is the time. The road back is: $50(X - 1)$. The road is the same length so $40X = 50(X - 1) \rightarrow X = 5$ hours. The distance is 200 Km.

QUESTION 378

The average speed of a Zebra is 4 times faster than that of a horse. The Zebra started to run at 5:00 o'clock and the horse started two hours later. What is the Zebra's speed if the total distance that the two animals traveled until 10:00 o'clock is 46 Km?

- A. 11.5.
- B. 12.
- C. 16.
- D. 8.
- E. 6.5.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Let X be the horse's speed. The following equation came from the data: $4X \times 5 + X \times 3 = 46 \rightarrow X = 2$ Km/h. The zebra's speed is 8 Km/h.

QUESTION 379

Two dung beetles start to run simultaneously towards each other when they're 150 feet apart. The first beetle runs at a speed of 20 feet per minute and the second beetle runs at a speed of 10 feet per minute. At the moment they start running towards each other a fly leaves the first beetle and flies towards the second one at a speed of 70 feet per minute, when he gets there he turns around and starts to fly towards the first beetle and so on. What is the total distance in feet that the fly will travel until the beetles meet?

- A. 250.
- B. 200.
- C. 300.
- D. 350.
- E. 400.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The distance between the two beetles is 150 feet; they are running together at a speed of $(10 + 20) \times 30$ feet per minute, therefore it will take them 5 minutes to meet. The fly flies at a speed of 70 feet per minute so he travels a total distance of $5 \times 70 = 350$ feet.

QUESTION 380

In a jar there are balls in different colors: blue, red, green and yellow.

The probability of drawing a blue ball is $\frac{1}{8}$.

The probability of drawing a red ball is $\frac{1}{5}$.

The probability of drawing a green ball is $\frac{1}{10}$.

If a jar cannot contain more than 50 balls, how many yellow balls are in the Jar?

- A. 23.
- B. 20.
- C. 24.
- D. 17.
- E. 25.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

If $\frac{1}{8}$ is the probability of drawing a blue ball then there are $40 \times \frac{1}{8} = 5$ blue balls in the jar. And with the same principle there are 8 red balls and 4 green ones. $40 - 5 - 8 - 4 = 23$ balls (yellow is the only color left).

QUESTION 381

A Barman's train rails across an open track at 250 kilometers per hour. A regular passenger train travels at 68% of the Barman's train speed. If the two trains start moving from the same station at the same time, how much time longer will it take the passenger train than the Barman's to travel 850 kilometers?

- A. 2 hours and 24 minutes.
- B. 1 hour and 24 minutes.
- C. 2 hours and 36 minutes.
- D. 1 hour and 36 minutes.
- E. 5 hours.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Let's find the time it takes each train to travel 850 km.

The fast train: $850 / 250 = 3.4$ hours.

The slow train: $0.68 \times 250 = 170$ km/h. So the time is $850 / 170 = 5$ hours. The difference between the travel times is 1.6 hours or 1 hour and 36 minutes.

QUESTION 382

A Hawk can glide for 4 consecutive hours without resting using thermals only. An eagle can glide 14.5% longer without resting using the same thermals. If an eagle makes 3 stops during a certain glide, each stop after gliding its maximum possible time, how many hours long was the glide not including the resting time?

- A. 18.32.
- B. 13.74.
- C. 15.66.
- D. 9.16.
- E. 16.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

14.5% of 4 are 0.58. Thus, an eagle can fly for 4.58 consecutive hours without resting. Since the eagle rested 3 times, he could glide four periods 4×4.58 hours = 18.32 hours.

QUESTION 383

If $x = y + 3 + 4.5x$ and $y = x + 18$, what is the value of x/y ?

- A. $1/4$.
- B. $5/6$.
- C. $-6/5$.
- D. $-7/20$.
- E. 1.5.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Solve two equations with two variables. Put y in the first equation. We'll get $x = (x+18)+3+4.5x$, the value of x is $-14/3$ and $y = 40/3$. $x/y = -7/20$.

QUESTION 384

If $X^2=Y$ and $Y=4.5X+2.5$, which of the following could be the value of y ?

- A. 25.
- B. -0.5.
- C. 5.
- D. 10.
- E. 15.5.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$Y=4.5X+2.5$, $x = 5$ or -0.5 . Y can be 25 ($4.5*5 + 2.5$).

QUESTION 385

If $-3x+4y=28$ and $3x-2y=8$, what is the product of x and y ?

- A. 428.
- B. 622.
- C. 464.
- D. 264.
- E. 642.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

We can notice that adding both equations gives: $2y = 36$ thus $y = 18$. From one of the equations we can receive: $x = 44/3$, so the answer is $18 \times 44/3 = 6 \times 44 = 264$.

QUESTION 386

If $X+Y = 2X-2Z$, $X-2Y = 4Z$ and $X+Y+Z = 21$, what is the value of Y/Z ?

- A. -2.
- B. -4.5.
- C. 3.
- D. -1.7.
- E. 2.5.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

There are three equations with three variables, the solution is:
 $X = 0$, $Y = 42$ and $Z = -21$ so Y/Z is -2.

QUESTION 387

If $X/Y = 3X$ and $Y = 4-X$, what can be the value of $2X$?

- A. Seven and two thirds.
- B. Three and one third.
- C. Seven and one third.
- D. Two and one third.
- E. Three and two thirds.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

With both equations we'll get the following equation: $x(3x-11) = 0$. So, X is either 0 or $11/3$ we want the value of $2X$, meaning (c).

QUESTION 388

What is 0.05×0.05 in terms of percents?

- A. 25%
- B. 2.5%
- C. 0.25%
- D. 0.025%
- E. .0.025%

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Since 0.05 and 0.05 each have 2 decimal places, their product must have 4 ($2 + 2$) decimal places. Because 5×5 is 25, you need to add 2 zeros to get the correct number of decimal places, so the product of 0.05 and 0.05 is 0.0025. To change a decimal to a percentage you multiply by 100 by moving the decimal point 2 places to the right, so 0.0025 is 0.25%.

QUESTION 389

What is $0.04 \times 0.03 \times 0.2$ in terms of percent?

- A. 24%
- B. 2.4%
- C. 0.24%
- D. 0.024%
- E. 0.0024%

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The number we're supposed to see in the answers is $4 \times 3 \times 2 = 24$. It fits all answers. The real question is the decimal of the answer; the basic rule is to add the decimals ($2+2+1=5$). We want the answer in percent terms so we need to take two decimals down, overall- 3.

The answer is $24/1000$ (3 decimals) = 0.024%

QUESTION 390

A computer factory produces 4200 computers per month at a constant rate, how many computers are built every 30 minutes assuming that there are 28 days in one month?

- A. 2.25.
- B. 3.125.
- C. 4.5.
- D. 5.225.
- E. 6.25.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$4200/28$ is 150 computers per day, $150/24 = 25/4$ computers per hour = 6.25. Every thirty minutes half of that number is made, 3.125.

QUESTION 391

A pizza house sells 30 pizzas on a Friday night. On a weekday it sells 11% less. How many pizzas will the pizza house sell in a 28 days month assuming that Saturday is a "no business" day?

- A. 320.
- B. 654.
- C. 235.
- D. 600.
- E. 540.

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

On a weekday the pizza house sells 89% of 30 = 26.7 pizzas. In a month there are 4 Fridays $\rightarrow 4 \times 30 = 120$ pizzas. There are 4 x 5 weekdays (there is no Saturday) $\rightarrow 20 \times 26.7 = 534$. All together 654 pizzas.

QUESTION 392

Bart is working as a paper delivery boy in Springfield. He delivers 620 newspapers every day except on Saturdays and Sundays. If Bart earns 4.2 cents for every second newspaper he delivers, how much money can he earn in a month with 28 days?

- A. 378.2 \$
- B. 376.5 \$
- C. 287.8 \$
- D. 260.4 \$
- E. 96.9 \$

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

$(310 \text{ newspapers a day}) \times (5 \text{ days}) \times (4 \text{ weeks}) \times (4.2 \text{ cents}) = 26040 \text{ cents} = 260.4\$$.

QUESTION 393

A young and energetic cobbler fixes 3650 pairs of shoes every year, while an old yet experienced cobbler fixes 20% less than the young cobbler. In a shoe factory there are two old and one young cobblers working together. How many shoes can the factory fix every day assuming that there are 365 days a year?

- A. 26.
- B. 34.
- C. 36.
- D. 44.
- E. 48.

Correct Answer: A

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

An old cobbler fixes $0.8 \times 3650 = 2920$ shoes per year. In the factory there are two old and one young cobbler ---> $3650 + 2920 + 2920 = 9490$ shoes per year.

9490 shoes divided by 365 days is 26 shoes per day.

QUESTION 394

A carpenter makes 3 bunk beds every day. A military school needs to organize a place to sleep for 143 soldiers. If there are 5 carpenters working on the job, how many whole days in advance should they receive the order and start working in order to finish the right number of beds assuming that each bunk-bed is used by two soldiers?

- A. 3.
- B. 4.
- C. 5.
- D. 6.
- E. 7.

Correct Answer: C

Section: Problem-Solving Questions

Explanation

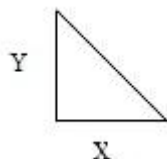
Explanation/Reference:

Explanation:

143 soldiers is not an even number so we need at least 72 beds (one will sleep alone). The carpenters together can complete 15 beds a day. $72/15$ is between 4 and 5 so they will need 5 days notice in order to complete the job on time.

QUESTION 395

X and Y are two sides of a triangle, is the area of the triangle an integer?



- (1) X is a prime number.
- (2) Y is an odd integer.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem. X Y

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The area of the triangle is $XY/2$.

Statement (1) tells us that X is a prime number, that can be even (2) or odd (3, 5, 7, etc.).

Statement (2) tells us that Y is an odd integer.

The multiplication of X and Y can be an odd number or an even number, thus we cannot determine if the area of the triangle is an integer or not. The correct answer is E.

QUESTION 396

Fuel tanker A can fill the underground reservoir in 12 minutes. How long will it take fuel tanker A and fuel tanker B to fill up the same reservoir together?

(1) The reservoir contains 3000 liters of fuel.

(2) Fuel tanker B alone will require the same number of hours to fill the same reservoir.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is insufficient since the size of the reservoir is irrelevant. Statement (2) is sufficient since it tells us that the second tanker has the same work rate as the first. So, it will take them both half the time it took the first tanker alone.

The correct answer is B.

QUESTION 397

Is the square root of A an integer?

(1) The last digit of A is 8.

(2) A is divisible by 6.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

If you square each digit {0, 1, 2,..., 8, 9}, you will see that the possible last digits for a square are 0, 1, 4, 5, 6 and 9. Thus, if the last digit of A is 8, A cannot be a square and the square root of A is not an integer. Statement (1) by itself is sufficient.

Statement (2) by itself is insufficient since there are numbers that are divisible by 6 and have an integer square root and numbers divisible by 6 that do not have an integer square root. The correct answer is A.

QUESTION 398

If Q and T are integers, what is the value of Q?

(1) $Q = 2T/7$.

(2) $T+7/2 = 7(Q+2)/4$

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We want to find the number value of Q.

In statement (1) we are given the ratio between Q and T, which is not sufficient.

Statement (2) can be simplified:

$$T+7/2 = 7(Q+2)/4 \quad T+7 = 7Q+14/2 \quad T+7 = 7Q/2 + 7 \quad T = 7Q/2$$

We can see that the same ratio is given in statement (2) also and more data is required to answer the question. Both statements give the same information. The correct answer is E.

QUESTION 399

X, Y>0, If $X^3 = Y$, is Y a fraction?

(1) X^2 is a fraction.

(2) $X > Y$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is sufficient. If X^2 is a fraction, X must also be a fraction. Meaning that X^3 and Y will also be fractions.

Statement (2) is sufficient. If X^3 is a fraction then X must be greater than X^3 , which is also equal to Y .

We get that from $X > Y$, so X^3 and Y are fractions.

The correct answer is D.

QUESTION 400

A spaceship in orbit rotates around the planet Pluto. How many full rotations can the spaceship complete in 20 hours.

(1) The radius of the rotation is 21,000 miles.

(2) The spaceship travels at 35 miles per second.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

In order to calculate the time it would take to complete one rotation, you need the radius and the velocity. Statement (1) provides the radius of rotation and (2) provides the velocity. The distance the spaceship has to travel in order to complete one rotation is and the speed is 35 miles per second. Divide the first by the second and you'll get the time it would take the spaceship to complete one rotation.

QUESTION 401

Is $X > Y$?

(1) $12X = 4C$.

(2) $C = 3Y4$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Since we need to compare between X and Y , look at both statements together.

(1) and (2) state that: $12X = 4C = 12Y4$ $X = Y4$.

Take $Y = -1$, $X = 1$: X is bigger than Y .

Take $X = 1$ and $Y = 1$: X is not bigger than Y .

We can see that the answer is not distinct and therefore more data is required in order to solve the question.

QUESTION 402

What is the circumference of circle O ?

(1) The circle inscribes a square.

(2) The perimeter of the square is 10.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

If a circle inscribes a square then the diagonal of the square is the diameter of the circle, which is sufficient to find the perimeter.

Statement (1) tells us about the square that is inscribed with out any further data. Statement (2) gives us the perimeter, which is equal to 4 times the side of the square. If we know the side of the square, we know its diagonal.
Both statements, taken together, are sufficient.

QUESTION 403

How many of the girls in a group of 200 children have an average score of 80 in their final exams? (1) 45% of the children have an average score of 80 in their final exams.

(2) 50% of the children in the group are girls.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From (1) by itself we can only learn that 90 kids have good grades. This statement is insufficient. From (2) we can learn that there are 100 girls in the group. Combining the statements doesn't help much since we know nothing about the overlapping of (1) and (2) and more data is required. The correct answer is E.

QUESTION 404

A paint shop sells spray cans at a flat charge of 50 cents per can. If a customer bought 10 cans and the owner decided to give that customer a special discount on the last two cans, what was the price of the two discounted cans?

(1) The customer paid four dollars and twenty cents total for the ten cans. (2) The customer bought the ten cans for an average price of 42 cents per can.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) tells us that 10 cans cost 4.2 dollars instead of 5 dollars and therefore the last two cans were sold for 20 cents. This statement is sufficient.

Statement (2) also tells us that the entire amount of cans cost 4.2 and therefore this statement is also sufficient.

QUESTION 405

Does the product of $XYZW = 16$?

(1) $Y = 1$.

(2) $X = 4Y$ and $ZW = 4Y^2$

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From (1) we know the value of Y only, which is 1.

From (2) and (1) we know the value of all the other parameters, $X = 4$ and $ZW = 4$.

Therefore, (1) and (2) together are sufficient.

QUESTION 406

If $A = 2B$, is $A^4 > B^4$?

(1) $A^2 = 4B^2$.

(2) $2A + B < A/2 + B$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is insufficient. Take $A=0$ and $B=0$, (1) is correct yet A is not bigger than B . Take different numbers, $A=6$ and $B=12$ A is larger than B .

Statement (2) is sufficient. The only possible way that A will not be larger than B is if they are both zero. (2) Claims that $A < 0$ and therefore A cannot be zero and this statement is sufficient, A is bigger than B .

QUESTION 407

5 numbers are randomly chosen. If their average is 20, how many of the numbers are larger than 15? (1) One of the numbers is 15.

(2) The average of three of the numbers is 15.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Let's look at two cases, where each one will give out different results. One of the numbers is 15 and three more are 15, 15 and 15 (with an average of 15).

The sum of all the numbers should be ($20 \times 5 = 100$).

The sum of the numbers we picked up is ($15 \times 4 = 60$) and therefore the last number should be 40 which is greater than 15. The answer in this case is 1.

Take another case: One of the numbers is 15 and three more are 14, 15 and 16 (with an average of 15). In this case there will be 2 numbers over 15. More data is required.

QUESTION 408

What is the value of P ?

(1) P is even.

(2) P is a square of a prime number.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) alone is insufficient since there is infinite number of possibilities. Statement (2) alone is insufficient since there is an infinite number of primes. The combination of the statements is sufficient since the only even square of a prime number is can be 22, which is 4. Both statements, taken together, are sufficient. The correct answer is C.

QUESTION 409

If $AB = 40$, what is the value of $AB(A + 2B)$?

(1) $A \cdot B = -18$.

(2) $A^2B = 80$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) alone is insufficient since we need the value of $A + 2B$. Statement (2) is sufficient. $A^2B = A(AB) = A(40) = 80$ $A=2$ and $B=20$. Now, we know that $A + 2B = 42$ and we can calculate the required expression.

The correct answer is B.

QUESTION 410

If $X^3Y = 24$, what is the value of $(X^3Y^3 \cdot X^2Y^2)$?

(1) $X^2Y^2 = 36$.

(2) $X^3Y^2 = 72$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.

- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is insufficient since the expression given is only one of two needed. Statement (2) by itself is sufficient since $X^3Y^2 = (X^3Y)Y = 24Y = 72Y = 3$.

If $Y=3$ then $X^3=8$ and so $X=2$.

The expression required is a combination of X and Y and is then calculable.

The correct answer is B.

QUESTION 411

X equals to Y% of what number?

(1) $X = 3Y$.

(2) $6Y+2X = 56X/14$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From (1) we have X and Y and therefore we can find A easily, $A = 300$. (2) Is identical to (1), simplify it and see that it can be written as $X = 3Y$. Either statement by itself is sufficient. The correct answer is D.

QUESTION 412

Which expression is larger $1/(5 - X)$ or $X/5$?

(1) $X < 8$.

(2) $X > -8$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The easiest way to solve such a problem is to plug in numbers. Use both statements to see that they are both insufficient even together. Take $X=0$: $1/(5-X) = 1/5$ and $X/5 = 0$, in this case the first expression is larger. Take $X=7$: $1/(5-X) = -1/2$ and $X/5 = 7/5$, in this case the second expression is larger. We can see that the answer is dependent on which numbers we choose and more data is required in order to determine the answer. The correct answer is E.

QUESTION 413

X is a two-digit number. If the ratio between the units digit and the tens digit is 1 to 2, what is the value of X?

- (1) The sum of the digits multiplied by the tens digit is 54.
 - (2) The product of the digits divided by 2 is 9.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

There are a limited number of possibilities: 21, 42, 63 and 84. According to statement (1), the only number that is compatible is 63. According to statement (2), the only number that is compatible is also 63. Either statement alone is sufficient. The correct answer is D.

QUESTION 414

What percent is X of Y?

- (1) Y is bigger than 2X by 54.
- (2) X is smaller than 3Y by 72.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) can be written as: $Y = 2X + 54$.

Statement (2) can be written as: $X = 3Y - 72$.

Combining both statements, we have two different equations containing X and Y and so we can solve and find the value of X and Y and calculate what is X percent of Y.

The correct answer is C.

QUESTION 415

A store bought Q windows at \$150 per window and W shelves at \$75 per shelf. What is the total price of the windows and the shelves?

- (1) The Q windows cost \$600.
- (2) $Q + W/2 = 12$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is all about the windows and therefore it is not sufficient by itself. Statement (2) tells us that $Q + W/2 = 12$, this is sufficient because the total price of windows and shelves is $150Q + 75W$.

Multiply the data in statement (2) is 150 to get: $150Q + 75W = 18,000$.

Statement (2) is sufficient by itself.

The correct answer is B.

QUESTION 416

What is the perimeter of a rectangle having an area of 60?

(1) The length and width of the rectangle are even integers smaller than 25. (2) The length of the rectangle is larger than three times the width.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The question tells you that the area is 60, the area of a rectangle is equal to length x width, in order to find the perimeter, one should find the value of the length and the value of the width. Statement (1) tells us that both the length and the width are even integers and therefore we know their exact values because 60 can be factorized to: 1x60, 2x30, 3x20, 4x15, 5x12 and 6x10. The only even integers smaller than 25 are (6x10) and we know the perimeter. The correct answer is A.

QUESTION 417

X is a positive integer, is X even?

(1) $9X^2$ is divisible by 4.

(2) $3X + 2$ is divisible by 8.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) tells us that $9X^2$ is an even number (it's divisible by 4) and therefore X^2 must be an even number. An odd number squared is also odd and therefore X must be even, this statement is sufficient. Statement (2) tells us that $3X + 2$ is an even number (it's divisible by 8). If you subtract 2 from $(3X+2)$ the result will still be even. If $3X$ is even then X must be even. This statement is also sufficient to answer the question. The correct answer is D.

QUESTION 418

X is a positive integer, is X even?

(1) $9X^2$ is divisible by 4.

(2) $3X + 2$ is divisible by 8.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We are to find if X is an even number.

Statement (1) tells us that $9X^2$ is an even number (it's divisible by 4) and therefore X^2 must be an even number. An odd number squared is also odd and therefore X must be even, this statement is sufficient. Statement (2) tells us that $3X + 2$ is an even number (it's divisible by 8). If you subtract 2 from $(3X+2)$ the result will still be even. If $3X$ is even then X must be even. This statement is also sufficient to answer the question.

QUESTION 419

If 10% of the employees of the state fare are police officers, what is the number of employees who are not police officers?

(1) 5% of the police officers employed in the fare are woman.

(2) 45% of the employees at the state fare are woman.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.

- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

In order to know how many people aren't officers you need a fix value, in other words you need to translate percentage into real values.

Statement (1) doesn't give any real numbers and therefore it's not sufficient. Statement (2) is the same as one in that matter, if we wanted to know the percentage of the woman officers, the statements would have been satisfying. More data is required. The correct answer is E.

QUESTION 420

Is X greater than 1?

(1) $X > X^2$.

(2) $X < -X^2$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) tells you that X is greater than X^2 , that is true only if X is between zero and one and so the answer to the question is no.

Statement two is identical to one, multiply both sides by (-1) and don't forget to change the sign of the inequality. Either statement is sufficient by itself.

The correct answer is D.

QUESTION 421

What is the sum of 7 consecutive integers?

(1) The median of the seven integers is 8.

(2) One of the integers is 7.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.

- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From statement (1) we have only one set of numbers. We have 5, 6, 7, 8, 9, 10 and 11. Statement (2) provides no additional data because we can see several sets containing 7. The correct answer is A.

QUESTION 422

M is a positive integer, is M odd?

(1) $2M^3 + 2M$ is divisible by 8.

(2) $M + 10$ is divisible by 10.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) tells us that $2M^3 + 2M$ is divisible by 8 and so $M^4 + M$ is divisible by 4 and is even. We have two choices: M^3 and M are either odd or even. This statement is insufficient. Statement (2) is sufficient, if $M + 10$ is divisible by 10 then $M + 10$ is an even number. This statement is sufficient and the answer is B.

QUESTION 423

What is the value of $x + 2y$?

(1) $2x + 4y = 20$

(2) $y = 5 - x$

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

If you take statement (1) and divide each term by 2, the result is $x + 2y = 10$. Thus, $x + 2y$ is solved for. If you take statement (2) and add x to both sides and multiply each term by 2, the result is also $x +$

$$\frac{1}{2}$$

$2y = 10$. Therefore, either statement is sufficient.

QUESTION 424

Is r a real number?

- (1) r is a rational number.
- (2) 2 is an irrational number.

$$\bar{r}$$

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Any real number is either rational or irrational and subtracting 5 from any rational or irrational will also be a real number. Statement (1) is sufficient. Statement (2) implies that if the square root of a number is irrational, the original number was either rational or irrational. Statement (2) is sufficient.

QUESTION 425

Is rectangle ABCD a square?

- (1) $m \angle ABC = 90$
- (2) $AC \perp CD$

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Since you know that ABCD is a rectangle, you already know that each vertex angle is 90 degrees. Statement (1) does not tell you any additional information about ABCD. Statement (2) states that the diagonals are perpendicular; a rectangle with perpendicular diagonals is a square. Statement (2) is sufficient.

QUESTION 426

What is the measure of an interior vertex angle of a pentagon?

- (1) The measure of each adjacent exterior angle is 72.
- (2) The pentagon is a regular polygon.

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: D

Section: Data-Sufficiency Questions**Explanation****Explanation/Reference:**

Explanation:

Either statement is sufficient. Statement (1) is sufficient because if the measure of each adjacent exterior angle is 72, then the measure of the interior angle is $180 - 72 = 108$. Statement (2) is also sufficient. Regular polygons contain congruent sides and congruent angles. If the pentagon is made up of 540 degrees, then $540 \div 5 = 108$ in each angle.

QUESTION 427

What is the value of x ?

- (1) $x + y = 6$
- (2) $2x - y = 9$

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: C

Section: Data-Sufficiency Questions**Explanation****Explanation/Reference:**

Explanation:

Since this question has two variables and two equations, they can be used together to solve for x and y . If both equations are combined, the result is $3x = 15$. Obviously x and subsequently y can be solved for now, but you do not need to finish the problem once you have reached this conclusion.

QUESTION 428

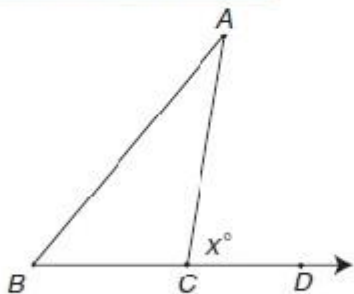
What is the value of x ?

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381 (393 of 416) 102%

46. What is the value of x ?



NOTE: FIGURE NOT DRAWN TO SCALE

(1) $m\angle ACB = 30$

(2) $m\angle A + \angle B = 150$

- (1) $m\angle ACB = 30$
 (2) $m\angle A + \angle B = 150$

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
 B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
 C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
 D. The problem can be solved using EITHER statement (1) only or statement (2) only.
 E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

In this problem, either statement is sufficient. Angle ACB is supplementary to x , so $180 - 30 = 150$ degrees. Statement (2) says that the sum of the two

remote interior angle equal 150 degrees; this is equal to the exterior angle, x . Note that the diagram is not drawn to scale so you should not rely on the diagram to calculate the answer.

QUESTION 429

It takes Joe and Ted four hours to paint a room when they work together. How long does it take Joe working by himself to paint the same room?

(1) The dimensions of the room are 12' by 12' by 8'.

(2) It takes Ted seven hours to paint the room by himself.

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The dimensions of the room are not significant and will not help you solve the problem. Statement (2) tells how long it takes Ted to paint the room alone. Using this information, you can set up the equation . In this equation, x is the time it takes Joe to paint the room, is the part of the room Joe

$$\frac{1}{x} + \frac{1}{7} = \frac{1}{4}$$

can paint in one hour, is the part of the room Ted can paint in one hour, and is the part of the room

$$\frac{1}{7}$$

they can paint together in one hour. Stop. You have an equation that can be solved, but you do not need to solve it. Statement (2) is sufficient.

QUESTION 430

Is $xy > 0$?

(1) $x > 1$

(2) $y < 0$

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.

- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) and statement (2) together are sufficient. To have a product greater than zero, either x and y are both positive or both negative. You need both statements to be able to tell. The fact that $x > 1$ lets you know that x is positive, and since $y < 0$, y is negative.

QUESTION 431

Given that C is the center of the circle and passes through C , what is the area of the sector of the

\overline{DB}

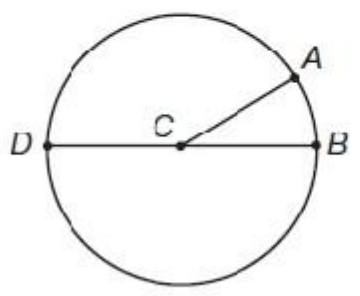
circle?

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381 (393 of 416) 102%

49. Given that C is the center of the circle and DB passes through C , what is the area of the sector of the circle?



(1) The diameter of the circle is 12.
(2) $m \angle C = 30^\circ$.

- (1) The diameter of the circle is 12.
(2) $m \angle C = 30^\circ$.

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
D. The problem can be solved using EITHER statement (1) only or statement (2) only.
E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

To find the area of the sector, use the formula where x is the angle measure of the

$$\frac{x}{360} = \pi r^2$$

central angle of the sector. The length of the diameter is necessary to find the length of the radius. Statement (1) and statement (2) together are sufficient.

QUESTION 432

Points A, B, and C are located in the same plane. What is the distance between point A and point C?

- (1) The distance between A and B is 100 cm.
 - (2) The distance between A and B is twice the distance between B and C.
- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
 - B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
 - C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
 - D. The problem can be solved using EITHER statement (1) only or statement (2) only.
 - E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

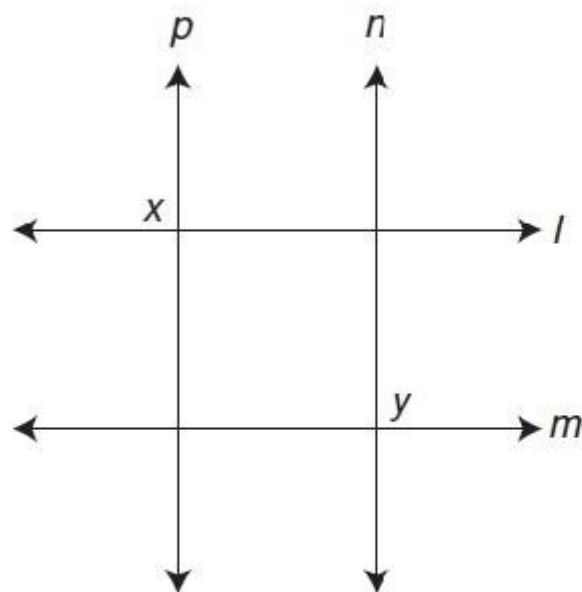
Even though the points are in the same plane, you are not sure if A, B, and C are collinear (contained on the same straight line), or even if B is between A and C. Not enough information is given in either statement.

QUESTION 433

In the following figure, $p \parallel n$. Is x supplementary to y ?

QUANTITATIVE PRACTICE TEST

51. In the following figure, $p \parallel n$. Is x supplementary to y ?



- (1) $l \perp p$
- (2) $l \parallel m$

52. Which store has a greater discount, store A or store B?

- (1) Store B has 20% off all items.
- (2) Store A has \$20 off all items.

53. Is $x + 1$ a factor of 12?

- (1) $x + 1$ is even.
- (2) $x + 1$ is a factor of both 2 and 3.

- (1) $l \perp p$
(2) $l \parallel m$

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The fact that l is perpendicular to p indicates that angle x is a right angle, but it tells you nothing about angle y . The fact that l is parallel to m in statement (2) is much more useful. Since p is parallel to n , you can use corresponding angles to figure out that y is equal to the angle adjacent to x . Therefore, x and y are supplementary.

QUESTION 434

Which store has a greater discount, store A or store B?

- (1) Store B has 20% off all items.
(2) Store A has \$20 off all items.

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Both statements are irrelevant because you do not know the cost of any of the items at either store.

QUESTION 435

Is $x + 1$ a factor of 12?

(1) $x + 1$ is even.

(2) $x + 1$ is a factor of both 2 and 3.

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) could mean that $x + 1 = 8$, which is not a factor of 12. If $x + 1$ is a factor of both 2 and 3, then $x = 0$ and $x + 1 = 1$. One is a factor of every number. Statement (2) will suffice by itself.

QUESTION 436

What is the value of x ?

(1) $22 < 3x + 1 < 28$

(2) x is an integer.

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Solve the compound inequality in statement (1). $22 < 3x + 1 < 28$. Subtract 1 from each part of the inequality. $22 - 1 < 3x + 1 - 1 < 28 - 1$. Divide each part by 3. The

$$\frac{21}{3} < \frac{3x}{3} < \frac{27}{3} \quad 7 < x < 9$$

result is that x is some number between 7 and 9; thus, statement (1) is not sufficient. Statement (2), together with statement (1), is sufficient, and the answer is conclusively one value--namely, 8.

QUESTION 437

If x and y are consecutive even integers, what is the value of xy ?

- (1) $x + y = 98$
(2) $y - x = 2$

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
D. The problem can be solved using EITHER statement (1) only or statement (2) only.
E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Since x and y are consecutive even integers, they are numbers such as 10 and 12 or 32 and 34. Using statement (1), the only two numbers that would satisfy the equation are 48 and 50. Statement (1) is sufficient. Statement (2) just restates the obvious; every two consecutive even integers are two numbers apart. This does not help you solve the problem.

QUESTION 438

What is the numerical value of $x^2 - 25$?

- (1) $x - 5 = 3$
(2) $4 - x = 5$

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).

- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Since $x^2 - 25$ is the difference between two perfect squares, its factors are $(x - 5)$ and $(x + 5)$. Statement (1) gives the value of $x - 5$. Statement (2) can be changed from $4 - x = 5$ to $4 = x + 5$ by adding x to both sides of the equation. Since you now know the numerical value of each factor, you can find the numerical value of $x^2 - 25$.

QUESTION 439

A rectangular courtyard with whole-number dimensions has an area of 60 square meters. Find the length of the courtyard.

- (1) The width is two more than twice the length.
- (2) The length of the diagonal of the courtyard is 13 meters.

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

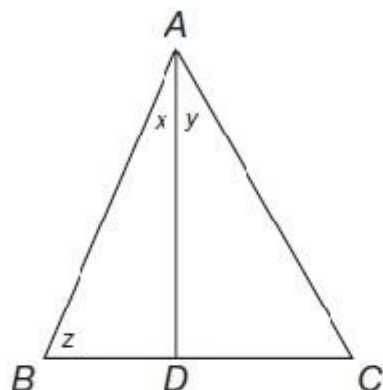
Explanation:

Let x = the length of the courtyard. Statement (1) states that $2x + 2$ = the width of the courtyard. Using the formula area = length \times width, we get the equation $60 = x(2x + 2)$, which can be solved for x . Statement (1) is sufficient. Using statement (2), the diagonal divides the courtyard into two congruent right triangles. If the diagonal is 13 meters, and the dimensions are whole numbers, this must be a 5--12--13 right triangle. The length is 5 meters, and statement (2) is also sufficient.

QUESTION 440

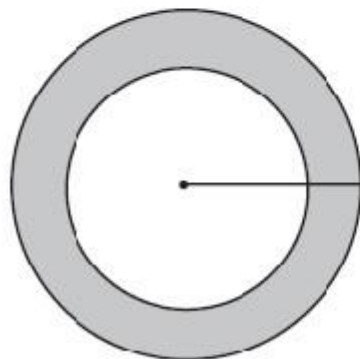
Is $x + y > 2z$?

58. Is $x + y > 2z$?



- (1) $\triangle ABC$ is equilateral.
- (2) $AD \perp BC$

59. The circles in the diagram are concentric circles. What is the area of the shaded region?



- (1) The area of the inner circle is 25π .
- (2) The diameter of the larger circle is 20.

- (1) ABC is equilateral.
(2) AD BC

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
D. The problem can be solved using EITHER statement (1) only or statement (2) only.
E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is sufficient. If the triangle is equilateral, then all sides and all angles are congruent. This would make $x + y = 60$ and $z = 60$; this is enough information to answer the question. From statement (2), you can only tell that is the altitude drawn to side , and that ADB and ADC are

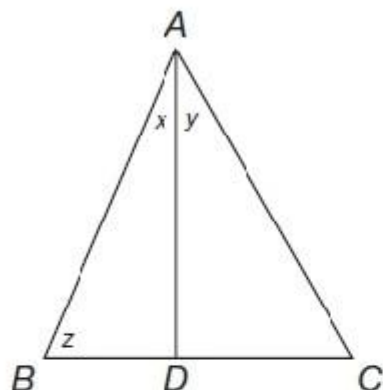
\overline{AD}

both right triangles.

QUESTION 441

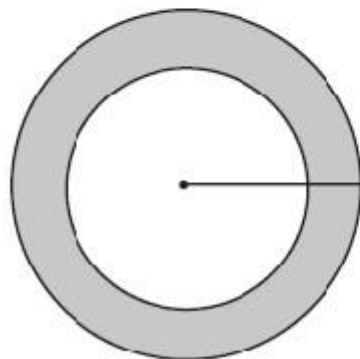
The circles in the diagram are concentric circles. What is the area of the shaded region?

58. Is $x + y > 2z$?



- (1) $\triangle ABC$ is equilateral.
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59. The circles in the diagram are concentric circles. What is the area of the shaded region?



- (1) The area of the inner circle is 25π .
- (2) The diameter of the larger circle is 20.

- (1) The area of the inner circle is 25.
(2) The diameter of the larger circle is 20.

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
D. The problem can be solved using EITHER statement (1) only or statement (2) only.
E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

To find the area of the shaded region, you need the area of the inner circle subtracted from the outer circle. Since the formula for the area of a circle is , you need to know at least the radius of

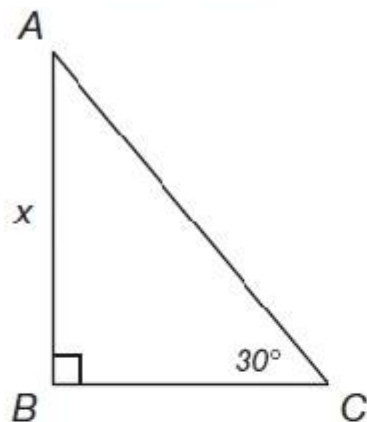
$$A = \pi r^2$$

each circle. Statement (1) gives you the area of the inner circle only, but no information about the outer circle. Statement (2) tells you the diameter of the outer circle is 20, so the radius is 10. Both statements are needed to answer the question.

QUESTION 442

Find the value of x.

60. Find the value of x .



(1) The length of BC is $2\sqrt{3}$.

(2) The length of AC is 4.

61. What is the value of $a + b$?

(1) $a^2 + b^2 = 13$

(1) The length of BC is $2\sqrt{3}$.

$\sqrt{3}$

(2) The length of AC is 4.

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From the diagram, if the measure of angle C is 30 degrees and angle B is a right angle, then ABC is

Δ

a 30--60--90 right triangle. Using statement (1), if the measure of BC is $2\sqrt{3}$, then the shortest side x

$\sqrt{3}$

must be $\frac{2\sqrt{3}}{2}$, which reduces to 2. Using statement (2), if the length of AC is 4 and AC is the

$\frac{2\sqrt{3}}{2}$

hypotenuse of the triangle, then the shortest side of the triangle x is equal to $\frac{4}{2} = 2$. Either statement is

$\frac{4}{2}$

sufficient.

QUESTION 443

What is the value of $a + b$?

- (1) $a^2 + b^2 = 13$
- (2) $2b =$

$$\frac{12}{a}$$

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Remember that $(a + b)^2 = a^2 + 2ab + b^2$. From statement (1), we know that $a^2 + b^2 = 13$. By cross multiplying in statement (2), we get $2ab = 12$. Since we know the values of $a^2 + b^2$ and $2ab$, and $(a + b)^2 = a^2 + 2ab + b^2$, we can now take the square root of the sum to find the value of $a + b$.

QUESTION 444

Between what two numbers is the measure of the third side of the triangle?

- (1) The sum of the two known sides is 10.
- (2) The difference between the two known sides is 6.

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The sum of the two smaller sides of a triangle must be greater than the longest side. To find the third side, subtract the two known values to get the lower bound and add the two known values to get the upper bound. The value of the third sides must be between these two numbers. Therefore, both statements are necessary.

QUESTION 445

What is the area of the circle?

- (1) The radius is 6.
- (2) The circumference is 12.

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The formula for the area of a circle is , so the radius of the circle must be found in order to

$$A = \pi r^2$$

use the formula. Statement (1) gives you the radius. Using statement (2), the formula can be found by the fact that the circumference is \times the diameter. If the diameter is 12, then the radius is 6. Stop; you do not actually need to compute the area. Either statement can be used to solve the problem.

QUESTION 446

What is the positive value of z?

- (1) $3y + z = 4$
- (2) $z^2 - z = 12$

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.

E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) contains two variables; you would need more information to solve for z . Statement (2) can be put into the form $z^2 - z - 12 = 0$. This equation can be solved by either factoring or by using the quadratic formula, and is sufficient to answer the question.

QUESTION 447

Two cars leave the same city traveling on the same road in the same direction. The second car leaves one hour after the first. How long will it take the second car to catch up with the first?

- (1) The second car is traveling 10 miles per hour faster than the first car.
- (2) The second car averages 60 miles per hour.

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

In this type of question, remember the formula distance = rate \times time. Let t = the time it takes the second car to catch up to the first. The fact that the second car is traveling 10 miles per hour faster than the first is not helpful by itself. We need to know more about either the distance traveled or the time traveled. Statement (2) alone also does not give enough information because we do not know the distances traveled. If we use both statements together, the first car's distance is $50(t + 1)$ and the second car's distance is $60t$. When the second car catches up, their distances will be the same. Setting the two distances equal to each other gives the equation $50t + 50 = 60t$. We can subtract $50t$ from both

sides and divide by 10. $\therefore t = 5$ hours.

$$\frac{50}{10} = \frac{10t}{10}$$

QUESTION 448

In right triangle XYZ, the $m\angle Y = 90^\circ$. What is the length of XZ?

- (1) The length of YZ = 6.
 (2) $m\angle Z = 45^\circ$

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
 B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
 C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
 D. The problem can be solved using EITHER statement (1) only or statement (2) only.
 E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) gives information about one of the three sides of the triangle, but this is not enough to solve for XZ. Statement (2) tells you that the right triangle in this problem is a 45--45--90 right triangle, or an isosceles right triangle. However, this also is not enough information to find XZ. By using the two statements together, if YZ = 6, then XZ = 6.

$\sqrt{2}$

QUESTION 449

Is ?

$$\frac{x}{y} = 7 \frac{x}{y}$$

- (1) $3x = 6y$
 (2)

$$\frac{x}{y} = 7 \cdot 1$$

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
 B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
 C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).

- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Divide both sides of the equation in statement (1) by $3y$. This results in the proportion . Since

$$\frac{x}{y} = \frac{6}{3}$$

, . Therefore, the answer to the original question would be yes. Statement (2) tells

$$\frac{x}{y} = \frac{6}{3}$$

you that is greater than 1; therefore, it must be an improper fraction. would then be a proper

$$\frac{x}{y}$$

fraction making it less than . Either statement is sufficient.

$$\frac{x}{y}$$

QUESTION 450

What is the total cost of six pencils and four notebooks?

- (1) Ten pencils and nine notebooks cost \$11.50.
- (2) Twelve pencils and eight notebooks cost \$11.00.

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (2) is the same as the original question doubled. Divide \$11.00 by 2 to answer the question.

Statement (1) is not sufficient by itself.

QUESTION 451

What is the ratio of the corresponding sides of two similar triangles?

(1) The ratio of the perimeters of the two triangles is 3:1.

(2) The ratio of the areas of the two triangles is 9:1.

A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.

B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.

C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).

D. The problem can be solved using EITHER statement (1) only or statement (2) only.

E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Either statement is sufficient. The ratio of the perimeters of two similar triangles is equal to the ratio of the corresponding sides. Also, the ratio of the areas of two similar triangles is equal to the squares of the ratios of the corresponding sides.

QUESTION 452

What percent of the class period is over?

(1) The time remaining is of the time that has passed.

$\frac{1}{4}$

(2) The class period is 42 minutes long.

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Let x equal the amount of time passed. Since the time remaining is of the time that has passed, this

$$\frac{1}{4}$$

time can be represented as x. Converting to decimal form may make this problem easier, so change

$$\frac{1}{4}$$

x to .25x. Since 1x is the time passed and .25x is the time remaining, then $1x + .25x$ is the total time.

$$\frac{1}{4}$$

This is equal to 1.25x. To calculate the percent of the period that is over, use the proportion

$$\frac{\text{part}}{\text{Whole}} = \% \frac{\square}{100}$$

Now set up a proportion using the time passed as the part and the total time for the class as the whole.

$$\frac{1}{1.25} = \frac{x}{100}$$

Cross-multiply to get $1.25x = 100$.

Divide both sides by 1.25.

$$\frac{1.25x}{1.25} = \frac{100}{1.25}$$

$$x = 80\%$$

80% of the class period is over.

For this particular question, the number of minutes in the class period is not needed to solve the problem.

QUESTION 453

Daniel rides to school each day on a path that takes him first to a point directly east of his house and then from there directly north to his school. How much shorter would his ride to school be if he could walk on a straight-line path directly to school from his home, instead of east and then north? (1) The direct straight-line distance from home to school is 17 miles. (2) The distance he rides to the east is 7 miles less than the distance he rides going north.

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

To solve this problem, you need to find the distance east and north that he travels. Since he goes directly east and then directly north, his path forms a right angle, which in turn is part of a right triangle. His straight-line distance to school is the hypotenuse of the right triangle formed by his paths. Although statement (1) gives you the hypotenuse, you do not know enough information to solve for the other sides. Statement (2) gives the relationship between the two legs of the right triangle, but again this is not enough information. Using the information from both statements, you can write an equation using the Pythagorean theorem: $a^2 + b^2 = c^2$. Let x = the distance he travels east and $x + 7$ = the distance he travels north. $x^2 + (x + 7)^2 = 17^2$. This equation can now be solved for the missing legs and therefore the solution to the problem.

QUESTION 454

What is the slope of line m ?

- (1) Line m intersects the x -axis at the point $(4, 0)$.
- (2) The equation of line m is $3y = x - 4$.

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.

- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (2) is sufficient. Change the equation to $y = mx + b$ form, where m is the slope of the line and b is the y-intercept. $3y = x - 4$ becomes $y = \frac{1}{3}x - \frac{4}{3}$. The slope of the line is $\frac{1}{3}$. Statement (1) is not

$$\frac{1}{3}x - \frac{4}{3}$$

sufficient because we cannot tell the slope of line by only looking at the x-intercept.

QUESTION 455

Jacob is a salesperson. He earns a monthly salary plus a commission on all sales over \$4,000. How much did he earn this month?

- (1) His monthly salary is \$855 and his total sales over \$4,000 were \$4,532.30.
- (2) His total sales for the month were \$8,532.30.

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

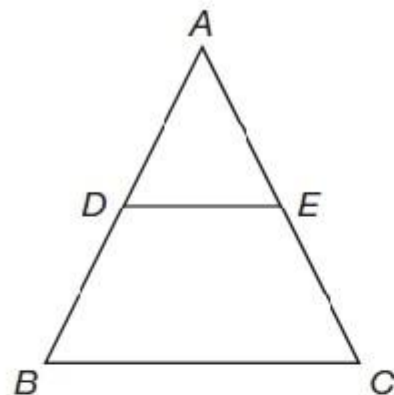
Explanation/Reference:

Explanation:

Neither statement is sufficient. The question never states the amount of commission, nor the commission rate, he gets on sales over \$4,000.

QUESTION 456

Is ABC similar to ADE?



- (1) BC is parallel to DE
- (2) $AD = AE$

75. The formula for compounded interest can be defined as $A = p(1 + r)^n$, where A is the total value of the investment, p is the principle invested, r is the interest rate per period, and n is the number of periods. If a \$1,000 principle is invested, which bank gives a better interest rate for a savings account, Bank A or Bank B?

- (1) The interest rate at Bank A is 4% compounded annually.
- (2) The total amount of interest earned at Bank B over a period of five years is \$276.28.

- (1) BC is parallel to DE
- (2) AD = AE

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is sufficient. In a triangle, when a line is drawn parallel to a base, the line divides the sides it intersects proportionally. This would make ABC similar to ADE. Using statement (2), knowing that AD = AE is not enough information to assume that other parts are proportional.

QUESTION 457

The formula for compounded interest can be defined as $A = p(1 + r)^n$, where A is the total value of the investment, p is the principle invested, r is the interest rate per period, and n is the number of periods. If a \$1,000 principle is invested, which bank gives a better interest rate for a savings account, Bank A or Bank B?

- (1) The interest rate at Bank A is 4% compounded annually. (2) The total amount of interest earned at Bank B over a period of five years is \$276.28.
- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
 - B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
 - C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
 - D. The problem can be solved using EITHER statement (1) only or statement (2) only.
 - E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

In order to have enough information to substitute into the formula, you would need both statements. Use $p = \$1,000$, $r = 0.04$ and $n = 5$ to compare Bank

A to Bank B. Again, you do not need to actually compute the interest earned once you can answer the question.

QUESTION 458

A fence has a square gate. What is the height of the gate?

- (1) The width of the gate is 30 inches.
- (2) The length of the diagonal brace of the gate is 30 inches.

$\sqrt{2}$

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Knowing that the gate is square and the diagonal is 30 , the Pythagorean theorem can be used with

$\sqrt{2}$

x as the side of the square. $x^2 + x^2 = (30)^2$. Or you may recall that the length of a leg will

$\sqrt{2}$

be because it is an isosceles triangle. Thus, statement (2) is sufficient. Since statement

$$\frac{30^2}{2} = 450$$

(1) gives the width and the gate is a square, then the height is the same as the width. Either statement is sufficient.

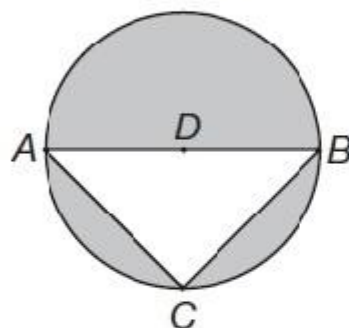
QUESTION 459

Find the area of the shaded region.

QUANTITATIVE PRACTICE TEST

- 76.** A fence has a square gate. What is the height of the gate?
- (1) The width of the gate is 30 inches.
 - (2) The length of the diagonal brace of the gate is $30\sqrt{2}$ inches.

- 77.** Find the area of the shaded region.



(1) $m\angle A = 43^\circ$.

(2) $AB = 10$ cm.

- 78.** A circle and a straight line are drawn on the same coordinate graph. In how many places do the two graphs intersect?
- (1) The equation of the circle is $x^2 + y^2 = 25$.
 - (2) The y -intercept of the straight line is 6.
- 79.** Michael left a city in a car traveling directly west. Katie left the same city two hours later going directly east traveling at the same rate as Michael. How long after Katie left will they be 350 miles apart?
- (1) An hour and a half after Katie left they are 250 miles apart.
 - (2) Michael's destination is 150 miles farther than Katie's.

- (1) $m A = 43^\circ$.
(2) $AB = 10$ cm.

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
D. The problem can be solved using EITHER statement (1) only or statement (2) only.
E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is not sufficient. The fact that angle A is 43 degrees does not give you enough information about the rest of the triangle or the circle. Statement (2) is also not sufficient. Even though the diameter, or , equals 10, you cannot assume that this is the altitude or height of the triangle.

AD

QUESTION 460

A circle and a straight line are drawn on the same coordinate graph. In how many places do the two graphs intersect?

- (1) The equation of the circle is $x^2 + y^2 = 25$.
(2) The y-intercept of the straight line is 6.

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
D. The problem can be solved using EITHER statement (1) only or statement (2) only.
E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From statement (1), the circle is centered at the origin and has a radius of 5. This obviously is not sufficient because it does not tell you anything about the line. Even though statement (2) gives you the y-intercept of the line, since you do not know the slope, the line could intersect the circle in 0, 1, or 2 different places. Neither statement is sufficient.

QUESTION 461

Michael left a city in a car traveling directly west. Katie left the same city two hours later going directly east traveling at the same rate as Michael. How long after Katie left will they be 350 miles apart?

(1) An hour and a half after Katie left they are 250 miles apart. (2) Michael's destination is 150 miles farther than Katie's.

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Using distance = rate \times time and the facts from statement (1), you can calculate the time they will be 350 miles apart. You are told that they are traveling at the same rate. To solve for the rate, you can use the equation that relates Michael's distance plus Katie's distance, which equals 250 miles at a time of 1.5 hours. Once the rate is known you can then solve for the time when they are 350 miles apart. Statement (2) is unnecessary information and does not help you to solve for the time.

QUESTION 462

What is the area of the shaded region?

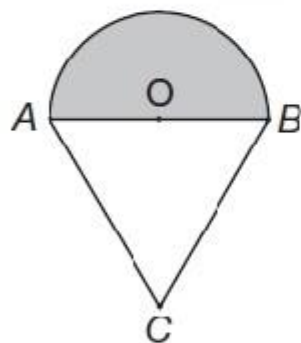
78. A circle and a straight line are drawn on the same coordinate graph. In how many places do the two graphs intersect?

- (1) The equation of the circle is $x^2 + y^2 = 25$.
- (2) The y -intercept of the straight line is 6.

79. Michael left a city in a car traveling directly west. Katie left the same city two hours later going directly east traveling at the same rate as Michael. How long after Katie left will they be 350 miles apart?

- (1) An hour and a half after Katie left they are 250 miles apart.
- (2) Michael's destination is 150 miles farther than Katie's.

80. What is the area of the shaded region?



- (1) $\triangle ABC$ is equilateral.
- (2) The length of \overline{BC} is 16 inches.

- (1) ABC is equilateral.
(2) The length of is 16 inches.

\overline{BC}

- A. Statement (1), BY ITSELF, will suffice to solve the problem, but NOT statement (2) by itself.
- B. Statement (2), BY ITSELF, will suffice to solve the problem, but NOT statement (1) by itself.
- C. The problem can be solved using statement (1) and statement (2) TOGETHER, but not ONLY statement (1) or statement (2).
- D. The problem can be solved using EITHER statement (1) only or statement (2) only.
- E. The problem CANNOT be solved using statement (1) and statement (2) TOGETHER.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Because you know that the triangle is equilateral from statement (1), you also know that each side has the same measure and that each angle is 60 degrees. This does not, however, tell you the length of the diameter or radius of the circle, which you need to know in order to find the area. Statement (2) alone is also insufficient because it tells you the length of one side of the triangle, but no other information about the figure. Using both statements together, the diameter is then 16; thus, the radius is 8. Therefore, the area of the semicircle can be calculated.

QUESTION 463

Is the integer X even?

- (1) X is divisible by 7.
(2) X is divisible by 11.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The fact that X is divisible by 7 does not help figure out whether it is odd or even, both even and odd numbers could be divisible by 7. The same applies for 11; both even and odd numbers could be divisible by 11. Both statements taken together do not shed a new light on the matter, there could be even and odd numbers that are divisible by 7 and 11.

QUESTION 464

Is the product XY divisible by 22?

- (1) X is divisible by 4.
 - (2) Y is divisible by 11.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The prime factors of 22 are 2 and 11. Hence, if X is divisible by 4, it is divisible by 2 and if Y is divisible by 11, surely XY is divisible by 22.

QUESTION 465

What is the value of (a+b)?

- (1) $a^2 - b^2 = 133$.
 - (2) $a - b = 7$.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions**Explanation****Explanation/Reference:**

Explanation:

Since $a^2 - b^2 = (a+b)(a-b)$, $133 = (a+b)7$, and $(a+b) = 19$.
Both statements are needed to solve the question.

QUESTION 466

What is the value of $X+Z$?

- (1) $X+Y=11$
(2) $Z+Y=13$

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
D. Either statement BY ITSELF is sufficient to answer the question.
E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions**Explanation****Explanation/Reference:**

Explanation:

Each statement alone leaves out one of the terms x or z , so we cannot find their sum using any statement alone. Moreover, even combining both statements does not help:

$$x+y=11 \quad y+z=13$$

$$y=11-x \quad y=13-z$$

$$11-x=13-z$$

$$z-x=13-11$$

It is only possible to find $z-x$.

QUESTION 467

What was the total amount John earned on his two investments?

- (1) John received an annual interest of 5% on one investment and 13% on the other. (2) John invested a total of \$15,000 on both investments.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Knowing the interest alone is not enough to calculate the profit. Knowing the total amount invested is not enough to calculate the profit, unless we have the interest rate.

Since we have no knowledge of the amount invested in each investment, there is no way to know how much was earned.

QUESTION 468

What is the sum of the two smallest integers in a set of different positive integers?

- (1) There are 4 integers in the set.
 - (2) The average of the integers in the set is 3.
-
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The only two possible sets that have 4 different positive integers and an average of 3 are: [1, 2, 3, 6] and [1, 2, 4, 5]. The sum of the two smallest integers in both sets is always 3.

QUESTION 469

If cookies are put in a jar and the jars of cookies are packed in a carton box, how many cookies does one carton box contain?

(1) Every carton box is filled to half its volume.

(2) Twenty cookies are put in each jar, and 12 jars are put in each carton box.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The first statement gives no information of the number of cookies. The volume of the carton box or the percent of its volume filled, do not help in finding any number. The second statement gives all the information needed in order to find the number of cookies packed in each carton box. The number of cookies per jar, and the number of jars per box are sufficient to calculate real numbers.

QUESTION 470

If X and Y are integers, what is the value of X?

(1)

$$6X = 4 - 9Y$$

(2)

$$1\frac{1}{3} - 3Y = 2Y$$

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

In order to find the value of a term in an equation with two unknowns, two different equations are needed. Since both equations given in statements 1 and 2 are, in fact, the same equation in a different shape, it is impossible to find the value of X or Y. $6X=4-9Y$ $1-3y=2X$

$$\frac{1}{3}$$

QUESTION 471

If x and y are primes, and $x@y=$, is $x@y<1$?

$$\frac{1}{x} + \frac{1}{y}$$

(1) $x=y$

(2) $x+y=4$

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Since $x=y$ and both are primes, could equal when $x=y=3$, or equal 1 when $x=y=2$. Therefore,

$$\frac{1}{x} + \frac{1}{y}$$

the first statement is not sufficient to solve.

According to the second statement, $x+y=4$, the only primes to match are $x=y=2$. Now we know that and the question is solved.

$$\frac{1}{x} + \frac{1}{y} = 1$$

QUESTION 472

A ball with a diameter of 10 cm is inscribed inside a rectangular box so that it touches all internal faces of the box. What is the volume trapped between the box and the ball?

- (1) The box is a cube
 - (2) The surface area of the box is 600 cm².
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) tells us that the diameter of the ball is the height of cube, so we can find its volume. Statement (2) actually tells us that the box is a cube, and the rest is similar to statement one.

QUESTION 473

A rectangular box is inscribed inside a cylinder. Both the width and length of the box is 2 cm. What is the volume of the cylinder?

- (1) The volume of the box is 20 cm³.
- (2) The radius of the cylinder is .

$$\sqrt{2}$$

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) can provide us the height of the cylinder while statement (2) gives us data we already can conclude from the question.

QUESTION 474

There are X watermelons of 10 Kg each, and Y Watermelons of R Kg each. The average weight of a watermelon is 12 Kg. What is the value of R?

(1) There are five heavier watermelons more than lighter watermelons. (2) The weight of the heavier watermelons in Kg is equal to their number.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) defines the relationship between X and Y.

Statement (2) defines the relationship between Y and R.

We get the following equations:

$10 \times X + R \times Y = 12(X+Y)$, $Y=X+5$, and $Y=R$. Now solve and find R.

QUESTION 475

The average height of a group of children is 125 cm. If one of the children leaves, the average height drops by 2 cm. how many kids were there originally?

- (1) The height of the child who left is twice greater than the height of the shortest child.
- (2) The height of the child who left is 130 cm.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.

- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Since we don't know how many children there are at all, it won't help us to know the relationship between the child who left and the shortest child. Statement (2) defines the connection between the sum of the heights before and after the departure and using the change in the sum divided by the new number of children we can find the number of children.

QUESTION 476

P is the standard deviation of the heights of NBA basketball players. R is the standard deviation of the heights of 8 weight lifters. Is the average height of the NBA players greater than the average height of the weight lifters?

(1) $R > P$

(2) There are 5 basketball players that are taller than the tallest weight lifter, and 2 players that are shorter than the shortest weight lifter.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Since we have no concrete info about the exact heights, or about the value of P and R, we cannot determine whether the NBA players or the weight lifters are taller. We need more data.

QUESTION 477

The average monthly income of 14 younger workers is X, Together with 60 older workers, the average monthly income of the workers rose to Y. what is the average monthly income of the older workers?

- (1) The factory's monthly budget for all salaries is 300,000\$, which is 10 times the salary budget for the younger workers.
(2) The monthly income of all the workers is 10 times the younger workers income.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
D. Either statement BY ITSELF is sufficient to answer the question.
E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) can tell us the value of Y, and the value of X, which is enough to solve this problem. Statement (2) alone only defines the connection between X and Y.

QUESTION 478

Liqueur A contains 24% of alcohol. What is the alcohol concentration of the mixed cocktail of liqueur A and B?

- (1) The mixing ratio of liqueur A and B is 1:4
(2) The alcohol concentration of liqueur B is 1.5 times greater than the alcohol concentration of the mixed cocktail.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
D. Either statement BY ITSELF is sufficient to answer the question.
E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) gives us the quantity of each of the liqueurs. Statement (2) gives us the connection between the alcohol concentration of liqueur B and the mixed cocktail. The equation looks like this: $0.2 \cdot 24 + 0.8(1.5X) = X$.

QUESTION 479

What is the average height of X buildings, each with height P meters, and 4X buildings each with height P/2?

- (1) $X = 5$, $P = 35$.
(2) $P = 40$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Of course, statement (1) gives the values of all the parameters, but the value of X is unnecessary. $(XP+2XP)/5X$ is equivalent to $3P/5$. Statement (2) also gives us the answer.

QUESTION 480

A, B, C and D are four consecutive points on a straight line. What is the distance between A to D? (1) $AC = 6$.
(2) $BD = 8$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

First, draw the line with the points marked.

We know AC and BD but it's not sufficient to know the length of AD . If the question said the points are evenly spaced then the answer would be solvable.

QUESTION 481

If X , Y and Z are positive integers, is X greater than Z ? Y ? (1) $XZ > Y > 0$.
(2) $Z^2 = X^2 + Y^2$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From statement (1) we learn that $X > Z + Y$ therefore X must be bigger than $Z + Y$ (positive integers). From statement (2) we learn that $X^2 = Z^2 + Y^2$ and that tells us nothing relevant.

QUESTION 482

Zigfield bought his car using $M\%$ of his bank savings. He also bought a house that costs 4 times the price of the car. What is the price of the house?

(1) $M = 12$.

(2) The price of the car and the house was \$140,000.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

With statement (1) we know that the car cost 12% of his life savings. From statement (2) we know that \$140,000 is the price of both the car and the house. Use simple ratio to find what is the cost of the house.

QUESTION 483

Is the largest of 7 consecutive numbers odd?

(1) The product of the seven numbers is zero.

(2) The sum of the seven numbers is zero.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From statement (1) we learn that there is a 0 among the seven numbers, yet the largest number can be odd or even. (0, 1, 2, 3, 4, 5, 6) or (-1, 0, 1, 2, 3, 4, 5). From statement (2) we know that the numbers are located symmetrically around the zero, therefore the largest number is even.

QUESTION 484

If X and Y are positive integers, what is the ratio between Y and X? (1) $XY = 150$.

(2) Y is 22% of X.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The question actually asks what is Y/X or X/Y .

Statement (1) is not sufficient because from the product of the two variables we can't make out the ratio. Statement (2) is sufficient by itself, $Y = 22X/100$
 $Y/X = 11/50$.

QUESTION 485

What is the value of $(X^2 + Y^2)$?

- (1) $(X - Y)^2 = 36$.
(2) $(X + Y)^2 = 48$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) can be written as $X^2 - 2XY + Y^2 = 36$.

Statement (2) can be written as $X^2 + 2XY + Y^2 = 48$.

Adding both equations will give: $2X^2 + 2Y^2 = 84$ $X^2 + Y^2 = 42$. Therefore, both statements are needed in order to solve the question.

QUESTION 486

There are X dogs in the dog pound, each dog eats Y Kg of food every day. What percent of the total food weight does each dog eat?

(1) If there were 3 dogs less then each dog could eat 1.2 Kg more than he is does now. (2) If there were half the dogs, each dog could eat 3 Kg more than he is does now.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

In order to know the answer we need two equations:

From statement (1) we can write: $XY = (X - 3)(Y + 1.2)$.

From statement (2) we can write: $XY = (X/2)(Y + 3)$.

You don't need to solve the equations, the answer is C, both equations are needed to solve the question.

QUESTION 487

If x and y are positive integers, is $5x(1/4)y < 1$?

(1) $Y = 3x$.

(2) $X = 2$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Use statement (1) to write: $5x(1/4)3x = (5/64)x$. Because x is a positive integer only, the expression will always be smaller than 1. This statement alone provides us the answer. Use statement (2) to write: $52(1/4)y$ the answer here is dependent on y , a different combinations of the variable y will give different results.

QUESTION 488

If A is a prime number, what is the value of A ?

(1) $0 < A < 10$.

(2) $(A - 2)$ is divisible by 3.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) narrows down A to be one of: 1, 2, 3, 5 and 7. This statement is insufficient. Statement (2) is also insufficient; there are a lot of numbers that fulfill this statement, like 17, 23 and many more. Even after you combine both statements, there are still two options: 5 and 2. In both, when subtracting 2 we get a number that is divisible by 3.

QUESTION 489

What is the value of ?

$$\frac{A}{5} + \frac{B}{5}$$

(1) $A+B=100$.

(2) $=10$.

$$\frac{A + B}{10}$$

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is sufficient enough because all you need to do is divide both sides by to get the answer, (20).

Statement (2) is also sufficient by it self, because all you need to do is to multiply both sides by 2 to get the correct answer.

QUESTION 490

Is $B^3 > B^2$?

(1) B is an integer.

(2) B is positive.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.

- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

There are two cases in which the inequality will not be true, when B is a fraction or when B is negative. Statements (1) and (2) cover both of these cases and therefore both statements, taken together, are sufficient.

QUESTION 491

If Peter spends \$460 on three pairs of shoes, how much did the least expensive shoes cost? (1) The ratio between the most expensive shoes to the least expensive shoes is 3 to 1. (2) The ratio between the least expensive shoes to all the other ones is 1 to 5.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We need to find what is the price of the least expensive among three shoes. Statement (1) gives us the ratio between the most expensive shoes and the least expensive one but that's not sufficient because we have no information about the middle priced shoes. Statement (2) is sufficient. If the ratio between the least expensive to all the shoes is 1 to 5 then we can calculate the price of the least expensive shoes, $(460/6)$.

QUESTION 492

What percent of 20 is Y?

- (1) 50 percent of Y is 5.
- (2) Y percent of 200 is 20.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.

- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The question, in other words, is asking what is the value of $(Y/20 \times 100)$. So all we need to find out is the value of Y. Statement (1) gives us Y, it is equal to 10. Statement (2) is also sufficient, it also tells us that Y is equal to 10.

QUESTION 493

Gwen has to divide her money between her three sons. If the older brother received 65% of the total amount and the other two received the same amount of money, how much money did the median brother get?

- (1) The combined amount of money of the older brother and the small one is \$45,000.
 - (2) The older brother received \$35,454.5.
-
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The data gave us the ratio of the amounts each one got (65 : 17.5 : 17.5), therefore all we need is one number to know how much each of the brothers received. Each of the statements above gives us enough information to solve the problem.

QUESTION 494

Little Timmy spends half of his allowance on his favorite pet Din and the other half on candies. How much money did Timmy spend on Din?

- (1) Din eats 1.5Kg of food every day.
- (2) Timmy buys 110 gr. Of candies each day. One Kg of candies costs \$7.5.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From the question we know the ratio of the money that Timmy is spending on Din and on candies. In order to know how much Timmy spends on each, we need to know one of the expenses in real Amount of money and not in percent terms. The first statement doesn't provide us any sufficient information but the second one gives us the exact amount of money that Timmy spends on Candies, which is equal to the amount that he spends on Din.

QUESTION 495

A, B, C, D and E are five consecutive points with equal spacing on a straight line. What is the distance between A to E?

- (1) $AB = 3$.
- (2) $BE = 9$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

First, draw the line with the points marked.

Because the points are evenly spaced on the straight line, only one measurement is needed to answer the question. Both statements give us a measurement of some kind therefore each of them, by itself is sufficient.

QUESTION 496

A, B and C are 3 consecutive points on an arc with a constant radius. What is the distance between A and C?

(1) The radius of the arc is 25 Cm.

(2) The length of AB is 5 Cm.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

In order to know the distance between two points on an arc you need to know the angle that the points make and the radius of the arc.

Statement (1) gives us the radius.

Statement (2) gives us the length of AB, but the question didn't mention that there is equal spacing and therefore the length of BC can't be found with both of the statements taken together.

QUESTION 497

If X and Y are positive integers, is X greater than Y?

(1) $X > Y$ 2.

(2) $X > 2$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Take some numbers for example.

$Y = 8$ from statement (1) we know that $X > 6$ and from statement (2) we know that $X > 2$, but X can be 7 or even 24 and he will still fit the equation properly, therefore both statements, taken together are not sufficient.

QUESTION 498

If X and Y are positive integers, is X greater than Y ?

(1) $X > 2$.

(2) $Y < 3$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From statement (1) we learn that X is 3 or bigger and from statement (2) we learn that Y is 2 or smaller. Therefore both statements are sufficient to answer the question.

QUESTION 499

Is the intersection of the two lines: $(x + y = 8)$ and $(4y - 4x = 16)$ inside the circle: $x^2 + y^2 = r^2$? (1) $r = 8$.

(2) The center of the circle is at the coordinate $(-99, -99)$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The intersection point of the two lines is easy to find, its (2, 6). In order for us to know if the point is inside the circle we need to know the exact location of the circle. Statement (1) clears the problem by giving us the radius so all the sufficient data is known. Statement (2) is not sufficient because it tells us nothing about the radius of the circle.

QUESTION 500

Is there an intersection between the line ($Y = aX - b$) and the parabola ($Y = X^2 + b$)?

- (1) $a < 0$.
- (2) $0 > b$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

First, draw the parabola and the line.

We can see that the thing that determines if the two intersect is b and not a . If $b > 0$ there is no intersection but if $b < 0$ there is an intersection no matter what the value of a is.

Therefore statement (2) is sufficient and (1) is not.

QUESTION 501

Is there a point of intersection between the circle ($X^2 + Y^2 = 4$) and the Line ($Y = aX + b$) ?

- (1) $a = b^2$.
- (2) The line intersects the X-axis at (40, 0).

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.

- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From statement (1) we learn that the equation of the line can be written as $Y = b_2X + b$. From statement (2) we learn that the line goes through the point (40, 0), from that we can find the equation of the line by plugging the coordinate in the equation: $0 = b_2(40) + b$. There is no need to solve it, both statements are sufficient to solve the problem.

QUESTION 502

Eddy gave $Q\%$ of the money he earned last year to his first wife Sandra, $W\%$ of the money he earned last year went to his second wife Tawana. How much money did Eddy earn this year?

- (1) $Q = 20$, $W = 2Q$.
 - (2) All the money Eddy earned last year went to his two wives.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From statement (1) and (2) taken together we know how much Eddy earned last year but we know Nothing about this year, we have no connections between them. Therefore, both statements are not sufficient to answer the question.

QUESTION 503

Of the 10,000 people that went to the state-fair, how many men ate at the fair?

- (1) The percentage of men who ate at the state-fair was twice as those who didn't eat.

(2) 3,500 women ate at the state-fair.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From statement (1) we know the ratio between the men who ate to those who didn't, but we don't know how many men were at the fair. Statement (2) doesn't reveal the number of woman that went to the fair, only the number of woman that ate there. Therefore, more data is needed to answer the question.

QUESTION 504

Out of the 100 kids that went to the party, how many girls danced there?

- (1) 25 girls don't like to dance and so they didn't.
 - (2) The number of boys that danced is twice the number that didn't dance.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From statement (1) we know that 25 out of X girls didn't dance. We need to know how many girls in total were in the party. Statement (2) doesn't tell us anything about the number of boys or girls that went to the party but only the ratio between those who danced to those who didn't. Therefore, more sufficient data is needed to solve the problem.

QUESTION 505

990 people went to the GMAT exam, how many boys didn't pass the test?

(1) 321 girls didn't pass the test, which is the number of boys that did. (2) One fifth of the people that went to the GMAT exam were boys who eventually didn't pass the test.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) gives us information about the number of boys that passed the test but no useful information about the other part of the boys.

Statement (2) by itself gives us the answer to the question ($\frac{1}{5} \times 990$).

Therefore, the answer is B.

QUESTION 506

Is the sum of X consecutive numbers zero?

- (1) The largest number is 5.
- (2) The median number is zero.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is not sufficient because the series of numbers is not blocked from the smaller numbers. Statement (2) is sufficient by itself because we know that if the median number is 0, then the sum of the numbers must be even.

QUESTION 507

What is the value of $A + B$?

(1) $A = 8 - B$.

(2) $(A + B)^2 - 64 = 0$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From statement (1) we know right away that $A + B = 8$.

From statement (2) we don't know if $A + B = 8$ or -8 .

Therefore only statement one is sufficient to answer the question.

QUESTION 508

What is the value of $(A - B)$?

(1) $A = 8 - B$.

(2) $A^2 - B^2 - 64 = 0$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions**Explanation****Explanation/Reference:**

Explanation:

From statement (1) we know the value of $A + B$.

From statement (2) we know the value of $A^2 - B^2 = (A - B)(A + B)$ $(A - B)8 = 64$ the answer is equal to 8, therefore both statements are needed in order to answer the question.

QUESTION 509

What is the value of $(A + B)$?

(1) $B = 12 - 3A$.

(2) $A^2 + 4A - 16 = 0$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions**Explanation****Explanation/Reference:**

Explanation:

From statement (1) we can find the exact value of B .

From statement (2), we can find two answers for variable A , therefore the answer is not unequivocally and both statements taken together are not enough, more sufficient data is needed.

QUESTION 510

If x and y are integers, is $3x(0.5)y < 1$?

(1) $y = 2x$.

(2) $x = 8$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.

- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Use statement (1) to write the expression: $3x(0.5)2x = (0.75)x$ the value of this expression can be either smaller or larger than 1, if x was only a positive integer the answer would be distinct. Use statement (2) alone to write the expression: $38(0.5)y$ this expression is either bigger or smaller than 1. Use both statements together: $(0.75)8 < 1$. Therefore both statements are needed to answer the question.

QUESTION 511

A and B are integers, is $(0.5)AB > 1$?

- (1) A is positive integer and B is negative integer.
- (2) A and B are two consecutive numbers.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From statement (1) we know that one is positive and the other is negative, therefore their product is negative. $(0.5)\text{negative} = \text{a number bigger than 1}$. This statement is sufficient to answer the question. From statement (2) we know the answer also. This is a tricky part. Try all the options: (-2 and 1), (-1 and 0), (0 and 1), (1 and 2). All of these options give out AB that is positive or equal to zero, in both cases $(0.5)AB$ will be either smaller than 1 or equal to 1 but never bigger. Therefore each statement by itself is sufficient.

QUESTION 512

Did the owner of the garage sale made more than \$130 last Saturday?

- (1) There were 15 products at the garage sale, each one cost \$25.
(2) All the products were sold.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
D. Either statement BY ITSELF is sufficient to answer the question.
E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) tells us how many products were in the sale and how much did each cost. Statement (2) tells us that all the products were sold, therefore the owner made $15 \times \$25 = \375 .

Both statements are required to answer the question.

QUESTION 513

What is the total amount of Jellybeans that Benjamin ate last week?

- (1) This week Benjamin ate 20% more Jellybeans than two weeks ago.
(2) Two weeks ago Benjamin ate 65 Jellybeans.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
D. Either statement BY ITSELF is sufficient to answer the question.
E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) gives us information about this week and two weeks ago, statement (2) also doesn't give us any sufficient data on last week, but on two

weeks ago.

Therefore, more sufficient data is required.

QUESTION 514

How many hamburgers did "Wacdonalds" sell last year?

(1) Two years ago "Wacdonalds" sold 422,000,000 hamburgers. (2) The average amount of hamburgers sold by "Wacdonalds" each year is 5 million.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) gives us data on the sales of two years ago. Statement (2) gives us data on the average amount of sales each year. We can't assume that the sales two years ago + last years sales divided by two is the average amount of sales, therefore more sufficient data is needed to answer the question.

QUESTION 515

At the end of the year 2002, Monica and Chandler each purchased a certificate of deposit that paid the same rate of interest, and each held the certificate of deposit through the end of 2002. If Chandler invested X dollars and Monica invested \$130,000, and if Chandler earned interest in 2002 totaling \$45,000, what was the amount of interest that Monica earned on her \$130,000 investment?

- (1) The rate of interest on the certificate of deposit that Chandler and Monica each purchased was 8.5% annually.
- (2) In 2002, Chandler invested \$529,412 in the certificate of deposit.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From statement (1) we know the rate of interest, so we can easily calculate how much Monica earned with her \$130,000 deposit. From statement (2) we know how much Chandler invested and we already know from the question how much he earned, we can calculate the interest and multiply it by the deposit that Monica made. Therefore, both statements, by themselves, are sufficient to answer the question.

QUESTION 516

Mickey made an X dollars loan at the beginning of 1996. Travis, who is Mickey's little brother also made a loan, only twice as large as Mickey's but with the same interest. If Travis pays \$10,000 interest on his loan each year, how big is Mickey's loan?

- (1) The rate of interest on the loan that Travis took is 6% annually.
 - (2) The loan that Travis made was \$166,667.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From statement (1) we know the rate of interest so we can find how much money Travis loaned and multiply it by 2 to get Mickey's loan. From statement (2) we know the amount Travis loaned, which is doubled than that of Mickey. Therefore, both statements, by themselves, are sufficient to answer the question.

QUESTION 517

If a, b, c, d and e are distinct integers, which one is the median?

- (1) $a < b < c$.
 - (2) $d > e$.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.

- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) tells us nothing about e and d, you can eliminate answers A. and (d). Statement (2) tells us nothing about a, b and c, you can eliminate answer B. . Try to plug in some numbers, take: $a=3$, $b=7$, $c=1$, $d=9$ and $e=8$. The median in that case is 7. Try other numbers, $a=8$, $b=15$, $c=6$, $d=10$ and $e=9$. The median is 9. First the median was b, then the median was e. More sufficient data is required to answer the question.

QUESTION 518

a, b and c are three odd and different integers. Which one is the median?

- (1) a, b and c are consecutive numbers.
- (2) $c > a$ and $b < c$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From statement (1) we can learn that if they are consecutive numbers, the median is B. From statement (2) we have a connection between c to a and b, but we don't know if a or b is the smallest among the three, therefore this statement, by itself, is not sufficient.

QUESTION 519

What is the ratio between W and Q?

- (1) $Q + W = 23$.
- (2) W is 25% of Q.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We are looking for Q/W. From statement (1) we know the sum of the two variables, which is not helpful in our case. From statement (2) we know that $W = (0.25)Q$, therefore we know the ratio between the two variables.

QUESTION 520

What is the product of X and Y?

(1) $2X + 2Y = 46$.

(2) $(X + Y)^2 = (X - Y)^2 + 8$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The product of X and Y is XY.

Statement (1) implies only about their sum.

Statement (2) can be written as: $X^2 + 2XY + Y^2 = X^2 - 2XY + Y^2 + 8$ $4XY = 8$ $XY = 2$.

Only statement (2) is sufficient.

QUESTION 521

The junior soccer team is one of the best teams in the state of Alabama. The season is divided into two parts, each part is 4 months. In the first part of the season, the junior soccer team won half of their 32 games. How many games did the team win in the entire season?

(1) In the second part of the season, the team lost 9 games, tied 6 games and won 18 games. (2) From the 32 games remaining the team won twice as much as she lost.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From statement (1) we can complete the missing data, in the first part of the season the team won 16 games and on the second part of the season, the team won 18 games. This statement is sufficient enough to answer the question.

Statement (2) is not sufficient by it self, it doesn't mention how many games were tied, therefore only statement (1) is sufficient.

QUESTION 522

"Queens" is a game of cards that distinguishes the cards into three groups: reds, blacks and jokers. Four packets of cards are shuffled and only 50 cards are drawn out. How many red cards are in the stack of the 50 cards?

- (1) The number of black cards is twice the number of red cards.
- (2) There is at least one joker in the stack of cards.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) implies that if we knew the number of jokers, the answer would be clear: take the cards that are not jokers and divide them by 3 to get the number of red cards. Statement (2) is not clear enough, the number of jokers is not distinct, therefore more data is needed and the two statements taken together are not sufficient.

QUESTION 523

Ron has three kinds of shirts in his closet, white shirts, black shirts and fancy shirts.
What is the ratio between the shirts in the closet?

- (1) The total number of shirts is 100.
 - (2) 30% of the shirts are black, which is twice as much as the fancy shirts.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From statement (1) we know the total amount of shirts in the closet.

Statement (2) gives us the ratio between the shirts.

30% of the shirts are black (which is 30 shirts), this number is twice as much as the fancy shirts (15). The remaining shirts must be white. We know the ratio; therefore both statements are required in order to answer the question correctly.

QUESTION 524

If building X is less than 40 store's high, is building Y taller than X?

- (1) Building Y is at least three times as high as building X. (2) On the fortieth floor of the Y building there is a gift shop.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.

E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) tells us clearly that the Y building is taller than the X one. Statement (2) implies that there is a gift shop on the 40th floor; therefore there are at least 40 floors on the Y building, which make it taller than X.

Both statements, by themselves, are sufficient enough to answer the question.

QUESTION 525

There are two major statues in Tasmanian County; the first is no more than 45 meters high. How tall is the second statue?

(1) The second statue is 10 meters higher than the first statue.

(2) Both statues together are 80 meters high.

A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.

B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.

C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.

D. Either statement BY ITSELF is sufficient to answer the question.

E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The information on the first statue in the question is confusing and irrelevant. Statement (1) tells us that: $B = A + 10$ (A is the first and B is the second statue). Statement (2) tells us that: $A + B = 80$, therefore we have two equations with two variables and so we can solve the problem.

Therefore, both statements are required in order to answer the question.

QUESTION 526

Tower X is smaller than tower Z. Is tower Y bigger than tower X? (1) Tower Z higher than tower Y.

(2) Tower Y is one of the tallest in the world.

A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.

- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We can write the data that is given to us: $X < Z$.

From statement (1) we can learn that: $Y < Z$ also, this is not enough. From statement (2) we know that Y is very tall, one of the highest in the world, but X can still be higher. Therefore, more sufficient data is required to answer the question.

QUESTION 527

How many steaks did the restaurant sell between 20:00 P.M and 21:00 P.M on Wednesday?

(1) On Tuesday the restaurant sold 25 steaks between the hours of 20:00 P.M and 21:00 P.M. (2) The average amount of steaks that are sold on Wednesdays is 25 steaks per hour.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Both statements do not provide us with any vital information about the specific number of steaks that were sold on that specific hour. The average is not accurate enough for the question and the sales of Tuesdays could be different than those in Wednesdays. Therefore, more sufficient data is required.

QUESTION 528

How many bananas did Jerry the monkey eat today?

- (1) Today, Jerry ate 30% more than his regular average.
- (2) Yesterday, Jerry ate 32 bananas, which is 15% less than his regular average.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From both statements together we know the average amount of bananas eaten by Jerry and that today Jerry ate 30% more than his regular average. Therefore, both statements together supply sufficient information to answer the question.

QUESTION 529

By what percent did the price of a pound of plum increase?

- (1) Each pound of plum costs 28 cents more.
 - (2) The original price per pound was 52 cents.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

By using both statements together we know what was the original price and by how much it increased. Each statement alone is not sufficient, but the combination of the two is sufficient. Remember, you don't have to solve the problem; you only need to make sure you can.

QUESTION 530

What is the new price for a pound of persimmon?

- (1) The old price is 45 cents per pound.
 - (2) The new price is more than half of the old price.
-
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We need to find the exact price of the persimmon.

If the old price is 45 cents and the new price is more than half of the old price then the exact price of the new persimmon is not an exact price but a price bigger than 22.5 cents. There isn't enough sufficient data to solve the question.

QUESTION 531

How many days would it take two carpenters, working together, to build 5 desks?

- (1) Each carpenter can build 4 desks in two days.
 - (2) Two carpenters, working together, work twice as fast as one carpenter working alone.
-
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

In order to solve the question, we need to know the output of one carpenter. From statement (1) we can learn that one carpenter has a certain output, and using the output formula we can calculate the desired time. Statement (2) is not useful; it tells us something that we can already assume by ourselves.

Therefore the answer is A.

QUESTION 532

How many diamond rings can a goldsmith refine in two weeks?

(1) There are 4 diamonds in each ring.

(2) One goldsmith can refine 2 diamonds in 4 hours.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Both statements combined are sufficient to answer the question. Statement (1) tells us how many diamonds are there in one ring. Statement (2) tells us how much time is needed to complete one ring; therefore both data's are sufficient to answer the question.

QUESTION 533

How long will it take 5 chambermaids to arrange the beds of the entire hotel?

(1) There are 4 floors in the hotel.

(2) Each floor contains 6 rooms.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

In order to answer the question, we need to know how many beds are there in the hotel. Both statements, taken together, don't supply that kind of information.

Therefore more sufficient data is required.

QUESTION 534

How many patients can a group of dermatologists diagnose in one day?

(1) Two dermatologists can diagnose 3 patients in 1.5 hours.

(2) Dermatologists work for 8 hours a day.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Both statements are not sufficient, you don't know what the size of the group of dermatologists is; it can be 3 doctors or even 45. Therefore more sufficient data is required.

QUESTION 535

How long will it take Jimmy to organize his stamp collection?

(1) Jimmy can organize 45 stamps in 2 hours.

(2) In the collection there are 30 regular stamps and 90 special ones.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.

E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Both statement combined are sufficient.

Statement (1) tells us that what is the "output" of organizing stamps and statement (2) tells us how many apples are there in the collection. Pay attention, it doesn't matter if the stamps are regular or special ones because statement (1) states that (any) 45 stamps can be arranged in 2 hours.

QUESTION 536

What is the value of $X + Y$?

(1) $X = 3Z$.

(2) $Y = 8Z$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

According to the statements, the value of $X + Y$ is $3Z + 8Z = 11Z$, but we don't know what's the value of Z . In other words, more sufficient data is required to answer the question.

QUESTION 537

What is the value of $(Q + W)$?

(1) $W = 3R$.

(2) $Q = -3R$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Combine both statements to get, $W + Q = 3R$ $3R = 0$.

In other words the statements tell us that $W = (-Q)$ or the opposite.

QUESTION 538

What is the value of (XY)?

(1) $X = 2/(9Q)$.

(2) $Y = 4.5Q$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Combine both statements to get, $XY = 4.5Q \times 2/(9Q) = 1$.

Therefore both statements taken together are sufficient.

QUESTION 539

A long rope was divided to three different parts. What is the length of the smallest piece?

- (1) The sum of the two smaller pieces is 14 inch.
- (2) The sum of the two larger pieces is 22 inch.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Translate the statements into variables: Let X, Y and Z be the three pieces of the rope, $X < Y < Z$.

Statement (1) can be written as: $X + Y = 14$.

Statement (2) can be written as: $Y + Z = 22$.

In order to find the length of the smallest piece, we need another equation or data. More data is required.

QUESTION 540

What is the ratio between A and B?

- (1) A is the sum of X, Y and Z.
- (2) B is the average (arithmetic mean) of X, Y and Z.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) tells us that $A = X + Y + Z$.

Statement (2) tells us that $B = (X + Y + Z)/3$.
Using both statements together: A/B is 3.
Both statements together are sufficient.

QUESTION 541

If X and Y are both integers different from zero, what is the value of $(X + 2Y)$?

- (1) $X^4 = Y^4$.
- (2) $X = 5$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Don't rush the answer, pay attention to the question carefully. Statement (1) tells us that X and Y are equal? No, they could have different signs. Statement (2) gives us X , which is not sufficient. Both statements together are also insufficient since Y can be 5 or -5. More sufficient data is required.

QUESTION 542

Is the average of X consecutive numbers odd?

- (1) The first number in the series is odd.
- (2) The sum of the numbers is odd.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions**Explanation****Explanation/Reference:**

Explanation:

Statement (1) is insufficient by itself, take X as 2: if the first number is odd, the sum of the two numbers is odd. Take X as 3: if the first number is odd, the sum of the three numbers is even. Statement (2) tells us that the sum of the numbers is odd and therefore the median must be odd. If the median is odd the average of these numbers is also odd because that means that there is an even amount of even numbers and an odd amount of odd numbers. This statement is sufficient by itself.

QUESTION 543

If X and Y are integers, what is the value of XY?

(1) $X^3 - 3X^2 - 2X - 8 = 0$.

(2) $4 + 3Y = 2Y + 8$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C**Section: Data-Sufficiency Questions****Explanation****Explanation/Reference:**

Explanation:

Statement (1) can be written as $(X - 4)(X^2 + X + 2) = 0$. The roots of this equation are one integer and two complex numbers, which you should pay no attention to since you were told that X is an integer.

Statement (2) is a simple equation, $Y = 4$.

The value of the expression XY is 16.

Both statements, taken together, are sufficient to answer the question.

QUESTION 544

Each of the 850 local villagers in Lucia owns either a Golden Retriever or a Bernard. How many people own both?

(1) The number of villagers who own a Golden Retriever only is 300. (2) The number of villagers who own a Bernard only is 280.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.

- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Each one of the villagers, according to the question, has to own at least one of the two dogs. Statement (1) is insufficient because it says nothing about the Bernard owners. Statement (2) is insufficient because it says nothing about the Golden Retriever owners. Combine the statements, all the information we need is present, $(800 - 300 - 280)$ is equal to the number of people who own both races of dogs.

QUESTION 545

How much is Y percent of X?

- (1) 400% of Y is 90.
 - (2) X percent of Y is 25.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) gives us data on Y only regardless to X and therefore it's insufficient. Statement (2) tells us how much is X percent of Y. Make up numbers, $X = 25$ and $Y = 100$. X percent of Y is 25 but we also know how much is Y percent of X, 100 is 400% of 25 and therefore this statement is sufficient by itself.

QUESTION 546

What is the sum of 11 consecutive integers?

- (1) The median of the 11 integers is 6.
- (2) The average of the 11 integers is 6.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) provides us with the numbers themselves- 5 on each side of 6. From Statement (2) we know that average = sum / amount sum = 66. Therefore either statement is sufficient to answer the question.

QUESTION 547

X, Y and Z are three positive integers. If $Z = 2$, what is their sum?

- (1) $X + Y = 5$.
- (2) $3Y + 15 = 3X$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We need to find the value of $X + Y$ since Z is already given to us. Statement (1) is insufficient since we need the sum of X and Y . Statement (2) can be written as: $3X - 3Y = 15$ $X - Y = 5$, you can see that both statements are the same and therefore more sufficient data is required.

QUESTION 548

Is Y even?

- (1) $2Y$ is even.
- (2) Y^2 is even.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) by itself is insufficient because every number that is multiplied by 2 will result in an even number. Statement (2) is also insufficient by itself since numbers like fulfills this statement although it's not even. Combine the statements and Y must be an even number.

QUESTION 549

What is the average price of three different DVD's?

- (1) The first DVD costs 125 dollars.
- (2) The sum of the prices of the second and the third DVD's is 300 dollars.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) gives us information about the first DVD only and therefore it's not sufficient. Statement (2) gives us information only about two of the DVD's and therefore this statement by itself is not sufficient either.

Combining both statements we have enough data to calculate the average. If X, Y and Z are the prices of the three DVD's, statement (1) tells us the value of X and statement (2) the value of the other two so we can calculate the average: $(X+Y+Z)/3$. Therefore, the two statements combined are sufficient.

QUESTION 550

Did it take Reese more than 24 minutes to bake the carrot cake?

- (1) Reese spends more than 1260 seconds on the cake.
 - (2) Reese spends less than 1560 seconds on the cake.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Define X as the time Reese spends on the cake.

Statement (1) tell us that $X > 1260$ seconds, which is 21 minutes and so this statement is insufficient because X can be 22 or even 28 and we cannot determine for sure that X is smaller or bigger than 24. Statement (2) tells us that $X < 26$ and it's not sufficient because X can be either 25 or 21. Combining both statements wouldn't help ($21 < X < 26$) because X can be bigger than 24 (25) or smaller (22).

QUESTION 551

Did Sammy drive more than 21 kilometers last night?

- (1) Sammy drove more than 20,000 meters last night.
 - (2) Sammy drove less than 20,500 meters last night.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions**Explanation****Explanation/Reference:**

Explanation:

Define Y as the number of kilometers that Sammy drove last night. We are asked if $Y > 21$. Statement (1) tells us that $Y > 20$ kilometers which is not sufficient by itself because Y can be smaller or bigger than 21 kilometers.

Statement (2) tells us that the number of kilometers that Sammy drove is less than 20.5 and therefore this statement is sufficient by itself.

QUESTION 552

One person won the lottery this week, what is the probability that it was a woman over the age of 40?

(1) 55% of all the lottery participants are male.

(2) 60% of all the lottery participants are over the age of 40.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions**Explanation****Explanation/Reference:**

Explanation:

We need to know what is the probability that one of the lottery participants is a woman over the age of 40. Statement (1) tells us that 45% of the participants are woman and statement (2) tells us that 60% of the participants are over the age of 40. Combine both statements, we still lack some sufficient information about the cross-link between the groups.

QUESTION 553

If a kid is chosen randomly from his class, what is the probability that he would have blue eyes? (1) The class is in Denmark, where 95% of the population has blue eyes.

(2) 5% of the class has brownish eyes.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.

- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We need to know the ratio between the numbers of blue-eyed kids in the class to the others. Statement (1) gives us data about the average population but not specifically on the class. Statement (2) implies that 5% have brown eyes, but that doesn't necessarily mean that others have blue eyes, they could have green eyes as well. More sufficient data is required.

QUESTION 554

In a bulb factory there are different kinds of bulbs, what is the probability that a bulb chosen randomly is a halogen?

- (1) There are three times as many halogens than any other bulb in the factory. (2) The ratio between the halogen to all the other bulbs is 2 to 7.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We are asked what the ratio between the halogen to the not is. Statement (1) tells us that halogen can be found 3 times more often in the factory. The problem with this statement is that we don't know 3 times of what? Statement (2) is sufficient, it gives us enough data to solve the question.

QUESTION 555

How many people are in the van?

- (1) The average weight of each person is 75 Kg.
- (2) The people and the van together weigh 5000 Kg.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

STATEMENT (1) alone is not sufficient. We still need the total weight of the people: then we can divide by the average weight to obtain the number of people. STATEMENT (2) tells us how much the people and the van together weigh, but we don't know how much the people weigh. So STATEMENTS (1) and (2) together are not sufficient.
More sufficient data is required.

QUESTION 556

How many kids are spinning on a carousel?

- (1) The average weight of each kid is 25 Kg.
 - (2) The kids and the carousel together weigh 400 Kg.
-
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

STATEMENT (1) alone is not sufficient. We still need the total weight of the kids: then we can divide by the average weight to obtain the number of kids. STATEMENT (2) tells us how much the kids and the carousel together weigh, but we don't know how much the kids weigh. So STATEMENTS (1) and (2) together are not sufficient.

More sufficient data is required.

QUESTION 557

If ($0 < X < 30$), what is the value of X ?

- (1) When X is divided by 6 the remainder is 0.
 - (2) When X is divided by 12 the remainder is 0.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) by itself is insufficient because the possibilities are many: 6, 12, 18 and 24. Statement (2) by itself is insufficient because there are more than one options: 12 and 24. Even if we combine both statements, still we have two options and X is not distinct.

QUESTION 558

If ($0 < X < 70$), what is the value of X ?

- (1) When X is divided by 6 the remainder is 0.
 - (2) When X is divided by 11 the remainder is 4.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) by itself is insufficient because the possibilities are many: 6, 12, 18, Statement (2) by itself is insufficient because there are more than one options: 15, 26, ... When we search among all the numbers from statement one that is divisible by 6, we can see that only one of them will give a remainder of 4 when divided by 11 and that would be 48. Therefore, the crosslink between the two statements is sufficient.

QUESTION 559

How much was the original price of a car, which was sold for \$25,000?

(1) The original price was more than half of the price it was sold. (2) The car has appreciated in value by 35% from its original value.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is insufficient since it doesn't give us exact information about the original price, more than half is not accurate enough. Statement (2) is sufficient since it tells us that the original value is 65% of the price it was sold.

QUESTION 560

If a full glass of water holds 0.236 liters, how many liters are there in one pint?

- (1) One pint is 1/8 of a gallon.
- (2) One gallon is 3.78 liters.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The data about the glass of water is irrelevant, all you're asked is how many liters are there in a pint. Statement (1) is insufficient because we are told the conversion from pint to gallons only. Statement (2) is insufficient because we are told the conversion from gallons to liters only and we have no connection to pints.

Combine both statements so you know how many gallons is one pint and how many liters are in 1/8 of a gallon. Both statements taken together are sufficient.

QUESTION 561

One cubic centimeter is equal to 0.001 liters, is a volume of a rectangular tank larger than 0.001 liters?

(1) The rectangular tank holds 0.3 teaspoons. There are 0.0049 liters in one teaspoon. (2) The dimensions of the tank are 0.5 x 0.6 x 4 centimeters.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) gives us the amount of teaspoons that the tank holds and it gives us that conversion between teaspoons and liters. This statement is sufficient. Statement (2) is also sufficient since we are given the dimensions of the tank, we can calculate the volume and compare it to the volume of one cubic centimeter.

QUESTION 562

A television set cost \$65 in 1981, did it cost more than \$65 in 1983?

- (1) In 1981, the average family had to work three weeks in order to save up enough money to buy a television set.
- (2) In 1983, the average family had to work two weeks in order to save up enough money to buy a television set.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.

- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

STATEMENTS (1) and (2) together are insufficient. You need to know whether the wages of the average family changed. 3 weeks of work in 1981 could be worth more or less than 2 weeks of work in 1983. More sufficient data is required.

QUESTION 563

Last year, a bottle of milk cost \$1. Does it cost more than \$1 today?

(1) Last year, the average worker had to work 10 minutes to pay for a bottle of milk. (2) Today, the average worker had to work 8 minutes to pay for a bottle of milk.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

STATEMENTS (1) and (2) together are insufficient. You need to know whether the wages of the average worker changed. 10 minutes of work last year could be worth more or less than 8 minutes today.

QUESTION 564

Is the line to the rollercoaster getting longer or shorter by the minute?

- (1) Each rollercoaster can process 48 people in 4 minutes.
- (2) Every two minutes, 20 people join the line.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

STATEMENT (1) tells us the rate at which people are getting out of the line, but we need to know if anyone is joining the line to be able to answer the question. STATEMENT (2) gives us this information. Therefore the two together are sufficient to see that the net gain in people on the line is 2 per minute; the line is getting shorter.

QUESTION 565

There is a traffic jam in the freeway, is the number of cars getting bigger by the minute?

(1) 25 cars escape the traffic by exiting the freeway at the nearest exit every minute. (2) 40 new cars get stuck in the traffic jam every two minutes.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

STATEMENT (1) tells us the rate at which people are getting out of the traffic jam, but we need to know if anyone is joining the line to be able to answer the question. STATEMENT (2) gives us this information. Therefore the two together are sufficient to see that the net gain in number of cars on the line is 5 per minute; the number of cars is getting smaller.

QUESTION 566

Did the value of the house grow this year?

(1) If the neighborhood becomes more crowded the value of the house drops. (2) This year the neighborhood has gotten less crowded yet a new railway was built nearby.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) gives a casual link between the value of the house and the neighborhood, yet no data on the neighborhood was given in this statement. Statement (2) tells us that the neighborhood has gotten less crowded and so the value of the house grew. Statement (2) also tells us about a new railway that was built nearby but no link has been given to us about the connection between the value of the house and the rails. Both statements, taken together are sufficient.

QUESTION 567

Did the average cost of flying abroad decline this year? (1) If the geo-political situation in the area is evolving, the average cost of flying abroad declines. (2) The geo-political situation in the area is not evolving, yet more people fly this year than the previous years.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) gives us a link between the cost of flying abroad and the geo-political situation. Statement (2) tells us the geo-political situation and thus we know the changes in the average cost of flying abroad. The second piece of information given in statement (2) is irrelevant, we are not told about a

connection between the number of people and the price of flying abroad.
Both statements, taken together, are sufficient.

QUESTION 568

Derrick is flying a small Cessna light plane for 2 hours. What is Derrick's average flying speed in miles per hour?

- (1) Derrick flew 250 miles.
 - (2) Derrick's top speed was 200 miles per hour and his low speed was 100 miles per hour.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The average flying speed can be found by dividing the total distance by the total time. Statement (1) gives us the total distance and the total flying time is given to us in the question and therefore this statement is sufficient.
Statement (2) is irrelevant, the changes in velocities during the time interval don't affect the average speed. And therefore this statement is insufficient.

QUESTION 569

Fred drove from city A to city B. What is Fred's average speed?

- (1) Fred drove from city A to city C during a 4 hour period and from city C to city B during a 2-hour period.
 - (2) The distance between city A and city B is 600 miles.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) presents us with another city, which we don't know her relative location from city A or B. City C can be between city A and B or it can be somewhere else. Statement (2) tells us the distance between city A and B yet it doesn't give us any of the other distances. The average speed is calculated by dividing the total distance (which is unknown) by the total travel time (which is known). More sufficient data is needed.

QUESTION 570

What is the sum of the digits of a two digits number?

- (1) The sum of the digits is a number, which is divisible by 4.
- (2) The two-digit number is a prime number.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is insufficient since there are plenty of double-digit numbers who fit this statement. Statement (2) is insufficient since there are plenty of double-digit prime numbers. The combination of both statements is still not sufficient. Take 31 and 71: they both fit statement (1) and (2) but each has a different sum of digits.

QUESTION 571

How many liters of lime are needed in order to paint the entire wall of a castle?

- (1) The length of a wall is 45 yards.
- (2) The width of the wall is 50% of the length.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.

- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Neither statement defined how many liters are needed in order to paint a certain area of the wall and therefore we can't convert the area into liters of paint.

QUESTION 572

If one Pint is $\frac{1}{8}$ of a gallon, how many pints are needed in order to fill a large hogshead?

- (1) The hogshead is a cylinder with a diameter of 25 inch.
 - (2) The height of the hogshead is 100 inch.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Neither statement gave us the conversion factor from inches cubed to gallons or pints. Therefore, we can only calculate the volume of the hogshead but we can't convert it into pints.

QUESTION 573

Rick and Nick are sitting in their cars waiting in line to be served at the drive-in café. How many cars are in the line?

- (1) There are 13 cars between Rick and Nick.
- (2) There are 31 cars in front of Rick and 24 cars behind Nick.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Using both statements combined, we cannot determine who is in from who, is Rick further in the line than Nick or the opposite. Because of this we have two options for the number of cars.

The first (If Rick is in front): $31 + 13 + 24 = 68$.

The second (If Nick is in front): $18 + 13 + 11 = 42$.

More sufficient data is required.

QUESTION 574

Is $A > B$?

- (1) $A^2 > B^2$.
- (2) B is positive.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Use both statements, find two sets of numbers that fit the statements yet give a different result. Take $A = 2$, $B = 1$ the numbers fit the statements and $A > B$. Take $A = -2$, $B = 1$ the numbers fit the statements and $B > A$.

Therefore more sufficient data is required.

QUESTION 575

Is the area that is blocked between the line $Y = AX + B$, the Y-axis and the X-axis bigger than C?

(1) $A = 2$, $B = -1$.

(2) $C = 10$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Using both statements, the line is $Y = 2X$ and the area is 10.

Draw a rectangular axis system and draw a line.

You can see that the blocked area is a triangle with an area of $(2 \times 2 / 2 = 2)$ and therefore the area of the blocked area is smaller than 10.

Only if you use both statements together, you can answer the question.

QUESTION 576

In which of the following lines: $Y_1 = A_1X + B_1$, $Y_2 = A_2X + B_2$, is the angle X bigger?

(1) X is the angle between the line and the X-axis.

(2) $A_1 = 2A_2$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Both statements are sufficient.

Statement (1) defines the angle X of each line.

Statement (2) gives us the relevant data on each of the lines, the angle X is determined by the coefficient of X , thus A_1 and A_2 . The line with the bigger coefficient is the one with the bigger angle X .

QUESTION 577

If A stamps can be bought with B dollars, how many stamps can be bought with 10 dollars?

(1) B dollars are more than enough to buy 20 stamps.

(2) $B = 5$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is not accurate, it tells us that B dollars are more than enough to buy 20 stamps, in other words, the number of stamps that can be bought with B dollars is larger than 20. Statement (2) completes statement (1) but still both statements are insufficient together. All we know from the statements is that more than 20 stamps can be bought with 5 dollars.

More sufficient data is required.

QUESTION 578

What is the value of $(X + Y)$?

(1) Y is 20% more than X .

(2) $X = 120$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.

- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is insufficient by itself since we only know that $Y = 1.2X$ and the expression required is $(X + Y)$, which becomes $(X + 1.2X)$. Using statement (2) combined with statement (1), we know that the value of the expression becomes $(120 + 1.2 \times 120 = 144)$ and therefore both statements, taken together, are sufficient.

QUESTION 579

What is the value of $(X + Y)/X$?

- (1) Y is 35% more than X.
- (2) $Y = 88$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The expression can be written as: $(X + Y)/X = 1 + Y/X$ and therefore we need the ratio only. Statement (1) is sufficient because it gives us the ratio between Y and X, $Y = 1.35X$. Statement (2) is insufficient by itself since it supplies no data on the variable X.

QUESTION 580

How long will it take Jim to wax his car?

- (1) It would take Jim and Mike 40 minutes to wax Jim's car. (2) It would take Mike 1 hour and 20 minutes to wax his car.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) gives us the output of Jim and Mike together on Jim's car only. Statement (2) gives us Mike's output on his car and not Jim's car and therefore we can't conclude anything about the output of Mike on Jim's car. More sufficient data is required.

QUESTION 581

How much time will it take Gus to deliver 350 newspapers on his bikes?

(1) Tom and Gus, working together each on his bike, can deliver 100 newspapers in one hour. (2) Tom can deliver 25 newspapers in 30 minutes on Gus's bike.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) gives us the output of Gus and Tom, together, in order to answer the question we need to know the output of Tom on his bike alone. Statement (2) gives us almost that, it gives us the output of Tom on Gus's bike and as far as we are concerned, his bike could be a lot faster or slower and thus the output will change accordingly. More sufficient data is required.

QUESTION 582

How much time will it take two different fire extinguishers to shut down a level 3 fire?

(1) The first fire extinguisher can shut down a level 3 fire in 45 seconds. (2) The second fire extinguisher can shut down a level 3 fire in one minute and 20 seconds.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) gives you the output of the first fire extinguisher, which is $\frac{1}{45}$ fires in a second. Statement (2) gives you the output of the second fire extinguisher, which is $\frac{1}{110}$ fires in a second. Combine the two statements, we know the total output of the two extinguishers and so we can easily calculate the time it would take them to shut down the fire.

QUESTION 583

What is the average number of questions that Laura can write in three days if on the first day she wrote 20 questions?

- (1) Every passing day the number of questions that Laura writes grows by 20%.
(2) On the other two days, Laura wrote 53 questions.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Laura writes questions over a 3 day period.

In the first day Laura wrote 20 questions.

Statement (1) tells us that on the second day she wrote ($1.2 \times 20 = 24$) questions and on the third day she wrote (1.2×24). This statement is sufficient in order to calculate the average. Statement (2) is also sufficient, it gives us the sum of questions that Laura wrote in the other 2 days and therefore the average can be easily calculated.

Each statement is sufficient on its own.

QUESTION 584

How many pictures exactly did Sammy develop on Saturday?

(1) Sammy gave away 3 films for development.

(2) There are approximately 36 pictures in one film.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The question asked explicitly for an exact number of pictures. Statement (1) is not sufficient by itself because it gives us no data on the pictures. Statement (2) completes statement (1) but not accurately as the question required and therefore more sufficient or accurate data is required.

QUESTION 585

How long exactly did it take Claudia to drive from the beach house to her green house?

(1) Claudia drove at a constant speed of 55 miles per hour. (2) The approximate distance between the beach house and the green house is 200 miles.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions**Explanation****Explanation/Reference:**

Explanation:

We are specifically asked about the exact time and not an approximation. Statement (1) gives us the exact traveling speed of Claudia. Statement (2) gives us the approximate distance between the two houses and therefore we can only calculate the approximate duration and not the exact one. More accurate data is required.

QUESTION 586

Two giant identical poles have been planted in the ground. One of the poles was planted dipper than the other pole. The shadow of pole A is 10 meters long and the shadow of pole B is 8 meters long. How tall is pole B?

- (1) Pole A is hoisted 14 meters in the air.
(2) Pole B is located 2 meters from pole A.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
D. Either statement BY ITSELF is sufficient to answer the question.
E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions**Explanation****Explanation/Reference:**

Explanation:

The shadows are proportioned to their height.

Statement (1) gives us the height of pole A and so by using the proportion we can calculate the height of pole B. The proportions are $10/14 = 8/H_b$, from that we know the height of pole B. Statement (2) is insufficient because the distance between the poles is irrelevant to the question and it doesn't contribute anything.

QUESTION 587

A new taxi service charges money according to the weight of the passengers and their luggage or according to the distance they wish to travel. If the taxi service charges the highest among the two, according to what will the Smith's pay, weight or distance?

- (1) The total weight of the Smith's family including the luggage is 300 Kg. (2) The total distance, which the Smith's wish to travel is 100 Km.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.

- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We are given two possibilities of charging fee, according to two different criteria's but both statements don't provide us with the conversion factor from weight to amount of money or from distance to amount of money.

More sufficient data is required.

QUESTION 588

How many Popsicles can Amy and Megan eat in 30 minutes?

(2) Megan can eat 5 more Popsicles than Amy in 15 minutes.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is insufficient by itself because it only gives us the ratio between the two and we need a concrete number, which statement (2) provides. Altogether we have two equations with two unknowns and the solution is feasible by using both statements.

QUESTION 589

If there are 350 words in each page, how many pages can Susan type in one hour?

(1) There is an average of 30 twenty-word lines in one page.

(2) Susan can type 15 twenty-word lines in two minutes.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We are given the amount of words per one page, and we are asked how many pages can be typed in one hour. In order to be able to answer this question, we need to know the rate of Susan's typing. Statement (2) gives us just that, it tells us that Susan can type $(15 \times 20 = 300)$ words in two minutes and therefore this statement is sufficient by itself.

Statement (1) is insufficient because it only gives us an average data of 20 words lines with out any correlation to Susan's rate of typing.

QUESTION 590

A CNC machine produces metal parts through the machining process. How many aluminum cubes can the machine produce in 40 minutes?

(1) The CNC machine produces 3 steel cubes in 20 minutes. (2) The rate in which the machine produces steel cube is three times slower than the rate of producing aluminum cubes due to the lower density of aluminum relative to steel.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We are to find the rate in which the CNC machine produces aluminum cubes and then multiply it by the required time.

Statement (1) is insufficient because it gives us the rate of producing steel cubes, which is a different type of metal. Statement (2) tells us that the rate of

production is 3 times quicker in aluminum and therefore using both statements together, we can calculate the necessary rate.

QUESTION 591

In a group of 200 foreign workers, how many workers can read and write?

- (1) 80 workers can write.
- (2) 90 workers can read.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is insufficient because it tells us nothing about workers who can read. Statement (2) is insufficient because it tells us nothing about workers who can write. Combine the two, still you don't know if there is any overlapping between the two groups and thus more sufficient data is required.

QUESTION 592

In a group of 350 academics, how many are either British or French?

- (1) There are 100 British in the group.
- (2) There are 180 French in the group.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The question asks, how many are either British or French. In other words, how many people are British or French. Statement (1) is insufficient because it tells us nothing about the French. Statement (2) is insufficient for the same reason, only that it doesn't say anything about the British. Combine the two statements, you know that $(100 + 180 = 280)$ is the number of people that are either British or French.

QUESTION 593

There are 45 people on the quay, what is the most and the least number of people that are both sailors and erudite?

- (1) The number of sailors is 28.
 - (2) The number of erudite people is 30.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Use statements (1) and (2) together. You can see that the number of people in each of the groups together sums up to a number, which is more than 45 and therefore there must be an overlapping between the groups.

The maximum number of people in both groups is the size of the smaller group, thus 28 people. The minimum number of people in both groups is $(28 + 30 - 45 = 13)$.

Both statements, taken together, are sufficient.

QUESTION 594

47 people are standing behind a large dais, what is least number of people, behind the dais, that are blonde haired and over 6 feet tall?

- (1) The number of blond people is 35.
 - (2) The number of people who are less than 6 feet tall is 25.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.

- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Use statements (1) and (2) together. You can see that the number of people in each of the groups together sums up to a number, which is more than 47 and therefore there must be an overlapping between the groups.

The maximum number of people in both groups is the size of the smaller group, thus 25 people. The minimum number of people in both groups is $(25 + 35 - 47 = 13)$.

Both statements, taken together, are sufficient.

QUESTION 595

What is the value of X?

(1) $4X + 18 = 2X + 22$.

(2) $8/X + 14 = 6/X + 16$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We ought to find the value of the unknown X.

Statement (1) is sufficient because it presents us an equation where the only unknown is X. Statement (2) is also sufficient for the same reasons as the first one and therefore each statement is sufficient by itself.

QUESTION 596

If X and Y are integers, what is the value of Y/X?

(1) $X^3 + X^2 + 2X = 0$.

(2) $Y - 4 = 0$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

In order to find the value of Y/X , you need to use both statements to find each of the variables. Statement (1) gives only one possible root for X , the expression in statement (1) can be written as $X(X^2 + X + 2)$ the only solution for X which is an integer is 0, the other two are complex numbers.

Statement (2) tells us that $Y = 4$.

The value of Y/X is undefined, because the denominator is zero and therefore both statements are not sufficient in order to determine the value of Y/X .

QUESTION 597

What is the value of AB ?

(1) $A + 4 = 3A - 8$.

(2) $B^2 - 12B + 36 = 0$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is insufficient by itself. The value of A from this statement is 6. Statement (2) can be written as $(B - 6)^2 = 0$ and therefore the value of B is 6. Combine both statements to calculate the value of the required expression AB .

QUESTION 598

How many days will it take two windows cleaners to clean the entire 30 stories building?

(1) The first window cleaner can clean 15 windows in 10 minutes. (2) The second window cleaner can clean twice as much as the first cleaner in 15 minutes.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Both statements, taken together, are not sufficient. There is no data on how many windows are in each story of the building and so we can't calculate the time it would take the two cleaners to finish the job.

More sufficient data is required.

QUESTION 599

How long will it take until Andy and Tim to finish swimming 1500 meters?

- (1) Andy can swim at a constant rate of 100 meters in one minute.
(2) Tim can swim faster than Andy.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

There is a trick to this question, the time until both swimmers finish swimming 1500 meters is the time it takes the slower swimmer among the two to finish swimming. Statement (1) tells us the rate of Andy, we can calculate the time it would take him to finish 1500 meters. This statement is insufficient by itself since we don't know that Andy is slower than Tim. Statement (2) completes statement (1) by telling us that Tim is faster and so the time is determined by Andy's time.

Both statements, taken together, are sufficient.

QUESTION 600

There are three sprinters on a racetrack. How much time will it take all three to finish an 800 meters race?

(1) The first runner can run the fastest, he runs at a 110% of the slowest runner. (2) The slowest runner runs at a constant speed of 7 meters per second.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The trick to this question is to understand that the time it would take them all to finish the track is the time it would take the slowest sprinter to finish the track. Statement (1) tells us that the first sprinter is the fastest among the three. Statement (2) tells us that the third sprinter runs the slowest and therefore they determine the time it would take all of them to finish the track. The rate of the slowest sprinter is given and so this answer is solvable.

QUESTION 601

How many hours will it take ship A and ship B to transfer 50 cars from one side of the river to the next?

- (1) Ship A can transfer 5 cars in 10 minutes.
- (2) Ship B can transfer twice as many cars in half the time.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

This is a simple rate problem. In order to find the time it will take both ships to finish the job, we need to know the output of each ship.

Statement (1) gives us the output of ship A, which is 30 cars per hour. Statement (2) gives us the output of ship A, which is 120 cars per hour.

Both statements, taken together, are sufficient.

QUESTION 602

The town rules in Kid-Town require each house to have at least a ping-pong table or a soccer-table. If there are 50 houses in Kid-Town, how many houses carry both types of tables?

(1) The number of houses that have a ping-pong table only is 20. (2) The number of houses that have a soccer table is 40.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Pay attention to the statements, (1) gives you the exact number of houses who have a ping-pong table only as opposed to the other statement, which tells you that 40 houses have a soccer-table. There are two possible answers to the question: there are $(40 + 20 - 50 = 10)$ houses with both tables in them or there are 20 houses (the size of the small group). The answer is not distinct and therefore more sufficient data is required.

QUESTION 603

An air-balloon is filled with air, how long will it take to fill it assuming that its volume is 30 meters cubed?

(1) Every minute the pump fills 1 meter cubed and emits one fifth of that amount. (2) The net airflow to the balloon is 0.8-meter cube per minute.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.

- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The volume is given in the question and so we ought to find the rate of fulfillment. Statement (1) tells us that every minute 1 meter cubed is going in and 0.2 is going out, making a total of 0.8 meter cube air going in per minute. Statement (2) gives us right away the net flow of air going in to the balloon. Therefore, each statement is individually sufficient.

QUESTION 604

A waiter earns a basic amount of 500 pounds per month regardless of her tips. How much did the waiter receive on tips during the month of May?

(1) On May, the waiter earned a total amount of money that was 150% of the basic. (2) The waiter receives an average amount of 250 pounds on tips per month.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We need to find the amount of money that the waiter earned on tips. Statement (1) tells us that the total amount money earned is 150% of the basic, therefore the tips are 50% of 500 pounds, thus 250 pounds. This statement is sufficient. Statement (2) is insufficient since the amount of tips earned on may can be over or under the average and so we can't pinpoint the exact amount.

QUESTION 605

Willy the wale receives sugar cubes every time he does something exquisite. How many sugar cubes did Willy get on yesterday's show?

- (1) Today, Willy performed the same show as yesterday.
(2) Today, Willy received 11 sugar cubes.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The question asks about the number of cubes that Willy received on yesterday's show, which is dependent on his performance. Statement (1) tells us that Willy did the same show but it didn't mention how did he perform, did he do the same number of exquisite acts? This statement is insufficient. Statement (2) only completes statement (1) by telling us how many cubes of sugar he received. More sufficient data is required.

QUESTION 606

Last year, what was the average (arithmetic mean) number of cookies consumed by a person in the Swanson family?

- (1) Last year, the family consumed 45 boxes of cookies.
(2) Each box of cookies contains 12 delicious cookies.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We are required to find the number of cookies that each person consumed. Statement (1) and (2) tell us that (45×12) cookies were consumed by the entire family last year. This data is insufficient because we don't know how many members are in the Swanson family. More sufficient data is required.

QUESTION 607

What was the maximum wind speed on January 1998?

(1) The average (arithmetic mean) of the maximum monthly wind speed between March 1997 and January 1998 is 35 knots, which was higher by 12 knots from the average (arithmetic mean) of the maximum monthly wind speed between February 1997 and December 1997.

(2) The maximum wind speed on January 1998 was 8 knots higher than the maximum wind speed on February 1997.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The question doesn't tell us much, go straight to the statements. From statement (1) we can find the sum of the wind speeds between March 1997 and January 1998, which is $(11 \times 35 = 385)$ knots. The average of the other group of months is $(11 \times (35 - 12) = 253)$. The difference between the two numbers is the sum of the maximum in January 1998 and February 1997. Define J as the maximum on January and F as the maximum on February, you can write the following equation: $J + F = (385 - 253 = 132)$. J is what we're looking for.

Statement (2) can be written as $J - F = 8$.

We have two simple equations with two unknowns, both statements together are sufficient.

QUESTION 608

Is $A_5 > A_2$?

- (1) A is an integer.
- (2) A is positive.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.

- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

There are 3 cases in which the inequality is not true: when A is negative, when A is a fraction and when A is equal to 1. Statements (1) and (2) cover up two of the cases above, yet $A=1$ fulfills both statements and still the inequality will not be true. More sufficient data is required.

QUESTION 609

X, Y and Z are three numbers. If $Y = 5$, what is their sum?

- (1) $X + Z = 10$.
- (2) $Z + Y = 15$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We need to find the value of $X+Y+Z$. Y is given to us so we need the value of $(X+Z)$. Statement (1) is insufficient by itself since we are given the value of $(X - Z)$ and not $(X + Z)$. From statement (2) we can find the value of Z, and from there return to statement (1) and find the value of X. Both statements, taken together, are sufficient.

QUESTION 610

Bony and Clyde, each had to translate half of a new blockbuster movie. If Bony finished her half after two hours and 20 minutes, how long will it take Clyde to finish his half?

- (1) Bony can translate 3 lines of speech in 1 minute, which is one and a half faster than Clyde.

(2) The movie contains 840 lines of speech.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We are told that each of the translators has to finish the same job (each has to finish one half). Statement (1) tells us that Bony can translate 1.5 faster than Clyde and therefore it would take him 1.5 times more than Bony's time. This statement is sufficient, the data about the specific translation rate is irrelevant and so is statement (2).

QUESTION 611

Jean and Jordy each had to wash half of a rectangular floor. If Jean finished his part of the job after 45 minute, how long will it take Jordy to finish his half?

(1) Jean can wash 10 meters square in 5 minutes, which is twice as fast as Jordy. (2) The area of the rectangular floor is 180 meters squared.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We know how much time it took Jean to wash the floor and we need Jordy's time. Statement (1) tells us that the rate of Jean is double than the rate of Jordy and therefore it will take him twice as long to wash his half of the floor. The numbers that describe the rate of Jean are irrelevant to the question and so is statement (2) .

QUESTION 612

35% of the students in Cambridge study engineering. How many students in Cambridge study Aerospace engineering with honors?

(1) 18% of the total number of students in Cambridge, which is 10,000, study with honors. (2) One fifth of the honor students study Aerospace engineering.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) tells us that $(0.18 \times 10,000 = 1,800)$ student's study with honors. Statement (2) tells us that $(0.2 \times 1,800 = 360)$ is the number of students that study Aerospace engineering with honors.

Both statements, taken together, are sufficient.

QUESTION 613

If B is an odd number, what is the value of B?

- (1) $20 < B < 30$.
- (2) $(B - 1)$ is divisible by 3.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) narrows down B to the following numbers: 21, 23, 25, 27, 29. This statement is insufficient by itself. Statement (2) is also insufficient by itself since more than one numbers fulfill the statement. If you combine the two statements, you will narrow down B to be 25. Therefore both statements, taken together, are sufficient.

QUESTION 614

As the new basketball season reopened, 40 players received either a yellow ball or a red ball as a present. How many basketball players received the yellow ball as a present?

- (1) 16 players received the red ball.
 - (2) 50% more players received the yellow ball than players who received the red ball.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is sufficient since it gives us the number of players who received red balls. The number of players who received yellow balls is $(40 - 16 = 24)$.

Statement (2) is sufficient, Define X as the number of players that received a red ball. $X + 3X/2 = 40$ $X = 16$ and so $(40 - 16 = 24)$ is the number of players who received a yellow ball.

QUESTION 615

Is X bigger or smaller than Y?

- (1) $X > Z$.
 - (2) $Y > Z$.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Use both statements. Pick $Z = 2$.

$X=3$, $Y=4$ fulfill both statements and $Y>X$.

$X=4$, $Y=3$ fulfill both statements and $Y<X$.

Therefore more sufficient data is required.

QUESTION 616

A hose was divided into 3 smaller and different in size hoses. What is the difference between the length of the largest and the smallest hose?

(1) The sum of the two larger hoses is 45 feet.

(2) The sum of the two smaller hoses is 23.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Translate the statements into variables: Let X , Y and Z be the three pieces of the hose, $X<Y<Z$.

Statement (1) can be written as: $Z + Y = 45$.

Statement (2) can be written as: $X + Y = 23$.

In order to find the difference between Z and X , subtract the second statement from the first to get:

$Z - X = 22$, and this is what we were looking for.

Both statements, taken together, are sufficient.

QUESTION 617

If Z is an integer, is $Z/3$ an odd integer?

- (1) $Z/3$ is an integer.
(2) $Z/6$ is an integer.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
D. Either statement BY ITSELF is sufficient to answer the question.
E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is insufficient. If $Z=6$, $Z/3$ is even and if $Z=9$, $Z/3$ is odd. Statement (2) is sufficient. If $Z/6 = X$ (X is an integer according to the statement) then $Z/3 = 2X$. $2X$ must be an even integer since it's a multiplication of an integer by 2. Therefore $Z/3$ is always even. Statement (2) is sufficient.

QUESTION 618

If X and Y are both integers different from zero, what is the value of $(X + Y)$?

- (1) $X^3 = Y^3$.
(2) $Y = 10$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
D. Either statement BY ITSELF is sufficient to answer the question.
E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) gives us the relations between X and Y , they must be equal because the power is odd. Statement (2) gives us Y and by using the first statement, we know the value of X also.

Both statements, taken together, are sufficient.

QUESTION 619

Is $a > b$?

- (1) $a^2 > b^2$
- (2) $a + d > b + d$

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Plug in numbers. The first statement will work when $a=3$ and $b=2$, for example and then $a^2=9$ and $b^2=4$. However, it will not work when $a=(-2)$ and $b=(-3)$, then $a^2=4$, and $b^2=9$. The second statement is sufficient, it is possible to subtract d from both sides of the inequality and get: $a + d - d > b + d - d$, or $a > b$.

QUESTION 620

At a certain library, there are fiction and non-fiction books only. How many of the books are non-fiction books?

- (1) There are 13,200 books at the library.
- (2) 35% of the books at the library are non-fiction books.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The first statement alone does not give the information needed to know how many of the 13,200 books are fiction and how many are non-fiction. The second statement does not tell us 35% of what number are non-fiction books. The two statements together, give us enough information to calculate 35% of 13,200 and find the number of non-fiction books.

QUESTION 621

Is $(a+b)^2 + (a+b)^3$ even?

- (1) a and b are positive.
- (2) $a > b$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Each statement alone is sufficient since there are only three possibilities:

- (1) a and b are even.
- (2) a and b are both odd.
- (3) One is odd and the other is even.

Any of the options give us an even result, thus, the expression is always even.

QUESTION 622

If A , B and C are integers. Is AB a factor of C ?

- (1) A is a factor of B .
- (2) B is a factor of C .

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.

E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Plug in numbers: $A=4$, $B=8$, $C=16$. A is a factor of B and B is a factor of C , However, $AB=32$ is not a factor of $C=16$.

QUESTION 623

What percent of the employees in X Company are managerial employees?

(1) 30% of the employees are technical.

(2) There are exactly 45 clerical employees in the X Company.

A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.

B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.

C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.

D. Either statement BY ITSELF is sufficient to answer the question.

E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The fact that 30% are technical or that 45 are clerical, does not tell anything about the rest of the workers. In this question, 3 types of workers appear, technical, clerical and managerial. However, there is no mention of whether other types of workers exist also. Since we cannot assume there are no other types, we cannot answer the question.

QUESTION 624

What is the average of a sequence of integers?

(1) There are 15 integers in the sequence.

(2) The sum of the integers in the sequence is 1275.

A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.

- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

An average of a set of integers is calculated as the sum of the integers divided by the number of integers in the sequence. Statement 1, gives the number of integers, which is not enough by itself. Statement 2, gives the sum of the integers in the sequence, which is not enough by itself. Using the data from both statements is enough to find the average.

QUESTION 625

The total volume of a swimming pool, when filled to capacity, is 2,652 gallons. How long will it take for the pool to fill up?

(1) Water is being purred into the empty pool at the rate of 120 gallons per minute. (2) It takes 5 hours to empty the pool when it is half full.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

It is sufficient to know the rate of water being purred and that the pool was empty to calculate the time needed for the pool to fill up: Therefore, statement 1 is sufficient. Statement 2 does not give information regarding the rate of filling the pool, thus, it is not sufficient.

QUESTION 626

If X is a positive integer, does X have six distinct positive factors?

- (1) X is the product of four different positive primes.
- (2) $X = 18$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

You can find out how many factors a number has if you know what that number is, or something about its prime factorization. Look for this as you move on to the statements. Statement (1) is sufficient. If X is the product of four different prime numbers it will have six different factors; 1, the four prime numbers, and itself.

Statement (2) is also sufficient. 18 has 6 different factors: 1, 2, 3, 6, 9 and 18.

QUESTION 627

If Y is a positive integer, does Y have four distinct positive factors?

(1) $Y = 8$.

(2) Y is a multiplication of two different odd numbers.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is sufficient since 8 has the following factors: 1, 2, 4 and 8. Statement (2) is not sufficient. For example, take 1 and 3, the product is 3, which has only two factors. But if you take 3 and 5, the product is 15 and we have 1, 3, 5 and 15 as factors of y , and we have four factors.

QUESTION 628

What is the value of $(X + Y)$?

- (1) $3X + 8 = 14 - 3Y$.
(2) $(X + Y)^2 = 4$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From statement (1) we can find that $3X + 3Y = 6$ $(X + Y) = 2$. (1) is sufficient.
Statement (2) is insufficient, $(X + Y)$ can be 2 or -2.

QUESTION 629

What is the value of $(X^2 + Y^2)$?

- (1) $4X^2 - 7 = 17 - 4Y^2$.
(2) $(X + Y)^2 = 6 + 2XY$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) can be written as $4X^2 + 4Y^2 = 24$ $X^2 + Y^2 = 6$. (1) is sufficient. Statement (2) can be simplified: $X^2 + 2XY + Y^2 = 6 + 2XY$ $X^2 + Y^2 = 6$.

This statement is also sufficient.

QUESTION 630

If X and Y are integers and $X + Y < 0$, can X be greater than Y ?

- (1) $X < -2$.
- (2) $Y > -4$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From each of the statements by itself we cannot determine if X can be greater than Y . Using both statements, we know the values each of the variables can get:

X : -3, -4, -5, ...

Y : -3, -2, -1, ...

We can see that X , at the most, can be equal to Y but it cannot be greater. Both statements, taken together, are sufficient.

QUESTION 631

If $X + Y = 17$, is $X < 0$?

- (1) $X < 17$.
- (2) $Y < 17$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is insufficient. X can be 16 and then $Y = 1$ or X could be -2 and then Y would be 19. Statement (2) is sufficient, if Y is smaller than 17 then X must be negative in order to balance the expression back to 17.

QUESTION 632

X, Y and Z are three positive prime integers. What is the value of Y?

- (1) The product XYZ is divisible by 4.
- (2) X is an odd number.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The question alone provides little information. Notice that it does not say that X, Y and Z are different. Statement (1) tells us that XYZ is divisible by 4 and therefore two of the prime numbers are 2, meaning that only one of the prime numbers are odd. Statement (2) completes statement (1) by adding that X is odd and therefore Y and Z must be equal to 2. Both statements, taken together, are sufficient.

QUESTION 633

Is $12x + 2 = 10 + 3x$?

- (1) $5x$ is smaller than or equal to 12
- (2) $2x$ is greater than or equal to 4

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.

E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We can simplify the given question ' is $9x = 8$? ' or ' is $x = 8/9$ ' ?

Statement (1) tells you that $5x$ is smaller than or equal to 12, $5x < 12$, which essentially means, $x < 12/5$. If $x < 12/5$, it is unknown whether x does or does not equal $8/9$. In other words, statement (1) may or may not be sufficient.

Statement (2) tells you that $2x$ is greater than or equal to 4. This means that x could never be less than two, therefore could never be equal to $8/9$ and this statement is sufficient.

QUESTION 634

Is $22Y = 10 + 7Y$?

(1) $-5Y$ is greater than or equal to -10 .

(2) $-6Y$ is smaller than or equal to -6 .

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We can simplify the given question ' is $15Y = 10$? ' or ' is $Y = 2/3$ ' ?

Statement (1) tells you that $-5Y$ is greater than or equal to -10 , $-5Y > -10$, which essentially means, $Y < 2$. If $Y < 2$, it is unknown whether Y does or does not equal to $2/3$. Statement (1) is insufficient.

Statement 2 tells you that $-6Y$ is smaller than or equal to -6 or that $Y > 1$. This means that Y could never be less than one, therefore could never be equal to $2/3$. This statement is sufficient.

QUESTION 635

What is the value of $(A + 3B/7)$?

(1) $5600A + 2400B = 12,000$.

(2) $50B - 50 + 250A = 9700$ $4200A$ $1900B$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Simplify the (1) statement by dividing both sides by 5600: $A + 3B/7 = 15/7$. This statement is sufficient.

Simplify the (2) statement by adding similar items to get: $4550A + 1950B = 9750$. Divide both sides by 4550 to get: $A + 3B/7 = 15/7$ this statement is also sufficient.

QUESTION 636

What is the value of $(X + 2Y/5)$?

(1) $292X - 675 + 80Y = 100$ $18X$ $44Y$.

(2) $300X + 80Y - 830 = 82.5$ $85X$ $66Y$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Simplify statement (1). Add similar items, $310X + 124Y = 775$ ----> $X + 2Y/5 = 2.5$. This statement is sufficient.
Do the same to statement (2) and you'll see that $385X + 146Y = 912.5$, when divided by 385: $X + 146Y/385 = 2.5$. This statement is insufficient.

QUESTION 637

What is the par value of the stock Y?

- (1) The purchase price of stock Y was 120 Australian dollars.
(2) Stock Y increases in value by 8.5% each year.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
D. Either statement BY ITSELF is sufficient to answer the question.
E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We are asked to specify the exact value of Y today.

Statement (1) is insufficient since it gives us the purchase value of the stock. However, no purchase date is provided.

Statement (2) is also insufficient since it doesn't specify how many years have passed since the stock was bought. Both statements together are also insufficient since they don't mention the time that has passed since the stock was bought.

QUESTION 638

A turtle is crossing a field, how many meters total did he pass?

- (1) The average speed of the turtle is 2 meters per minute. (2) Had the turtle walked 1 meter per minute faster than his average speed it would have finished the same path 40 minutes earlier.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
D. Either statement BY ITSELF is sufficient to answer the question.
E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions**Explanation****Explanation/Reference:**

Explanation:

Statement (1) gives us the average speed of the turtle; this statement is insufficient since the time is not given.

Statement (2) is also insufficient by itself since we don't know what the average speed is. Both statements combined are sufficient since we can calculate the distance $2 \cdot T = D$ and $3(T - 40) = D$, solve to get $D = 240$ meters.

QUESTION 639

What is the distance that Cynthia has to travel in order to get from the university to the dorms?

(1) Cynthia can walk half the distance in 7 minutes when walking at her fastest possible rate. (2) Cynthia is walking at an average speed of 1 mile in 12 minutes.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions**Explanation****Explanation/Reference:**

Explanation:

Statement (1) is insufficient since it only gives the time period of reaching the half point at the maximum speed.

Statement (2) is also insufficient by itself since we are only told the average speed. Both statements, taken together, are insufficient since the average speed, mentioned in (2) might be different than Cynthia's fastest possible rate.

QUESTION 640

The net value of a certain stock increased at a constant rate during the ten-year period between 1990 and 2000. What was the value of the stock in the year 1998?

(1) In 1991, the value of the stock was 130 U.S dollars. (2) In 1992, the value of the stock was 149.5 U.S dollars.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.

- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We are told that the stock increases its value by a constant rate and therefore we need to find some kind of pattern in order to know the value every year.

Statements (1) and (2) taken together are sufficient since they give us the percent increase of the stock from 1991 to 1992, which is 15%. The value of the stock in 1998 can be easily calculated, add 15% every year until 1998.

QUESTION 641

What is the total number of students that will finish their first degree this year at the Will hunt University?

- (1) The number of male students that will finish their first degree ten less than three-fifths of number of female students.
- (2) The number of male students is 360.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Let m = males and f = females.

From Statement (1) you know that $m = \frac{3}{5}f - 10$, but you don't know the actual values of m and f . From Statement (2) you know m , which can be fed into the equation derived from statement (1). These two equations with two variables are sufficient and therefore both statements, taken together, are sufficient.

QUESTION 642

If X is a prime number, is Y even.

- (1) $X = Y + 1$.
- (2) $X = 5$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is insufficient by itself since X can be even (2) or odd (3). Statement (2) is insufficient since we don't know the relation between X and Y. Both statements together are sufficient since we know that X is odd and that Y is an odd number plus one, meaning an even number.

QUESTION 643

Is Y/X odd?

- (1) Y is a prime number.
- (2) X is a prime number.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Each statement alone is insufficient since it tells us nothing of the other variable. (1) and (2) together are trick. If you take $X=Y=5$ or any other prime

number the result of Y/X will be odd but if you take $X=5$ and $Y=7$ for instance the result wouldn't even be an integer. The answer cannot be determined and more data is required.

QUESTION 644

If A and B are two different integers, is A/B even?

- (1) A is prime.
- (2) B is prime.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Each statement alone is insufficient since each statement refers to one variable only. (1) and (2) together are sufficient since dividing any two different primes will never result in an integer. A prime is a number that has exactly two natural divisors, 1, and itself and is therefore not divisible by any other integer.

QUESTION 645

How many mini sports cars does little Timmy own?

- (1) Timmy has 10 red sports cars.
- (2) The number of blue sports cars is 50% larger than the number of red sports cars.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) gives us the number of red cars and (2) the number of blue cars. We are not told that there are only two colors of sports cars and therefore more data is required.

QUESTION 646

How many keys are found on an average keyboard?

- (1) There are 20 number keys on an average keyboard.
 - (2) 20% of the keys on the keyboard are number keys.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) gives us the number of number keys only and thus is insufficient. Statement (2) alone is insufficient because it relates to the number stated in statement (1). Both statements together are sufficient since we are told that 20 buttons is 20% of the total and therefore there are 100 buttons on the average keyboard.

QUESTION 647

What is the amount of interest paid on an X dollars loan over a 6 months period?

- (1) $X = 12,000$.
 - (2) The interest rate is 5%.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) gives out the amount of money loaned.

Statement (2) gives the interest with out mentioning during what time is the interest 5%. Both statements are insufficient since we cannot determine what the interest on \$12,000 is during a 6 months period. The interest could be monthly or annually or anything else.

QUESTION 648

Merline made a \$360,000 mortgage on a house. How much interest total will she pay?

(1) The simple interest rate is 8.5% annually.

(2) It will take Merline 12 years to return the loan on the house.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) implies that the annual interest is 8.5%. it is not sufficient by itself since we do not have the time period of the return.

Statement (2) implies that 12 years have passed until Merline paid the loan but we do not have the interest rate.

During the 12 years, we can calculate the interest every year until we reach 12 years. Both statements together are sufficient.

A simple interest can be calculated using the following formula:

Principle (money loaned or invested)*rate (percent) *time = interest paid

QUESTION 649

Nicola bought a new cellular phone. How much did it cost him?

(1) Every month Nicola pays 45 franks to the cellular company, which includes the calls and the cellular device itself.

(2) Every month, Nicola spends twice on calls than on the cellular device.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) gives the total cost of the device and the calls, define C as calls and D as device. You can write the following equation: $C + D = 45$. (1) is insufficient. Statement (2) is also insufficient by itself, it implies that $C = 2D$. (1) and (2) together are sufficient to find D and C but that is not enough. D is the money spent on the device per month while we want the total price of the device. If we knew how many months he paid we would have enough data.

QUESTION 650

How much did Nancy pay for her new air-conditioner?

- (1) Nancy paid 12 payments, one every month.
- (2) On April, Nancy paid \$130.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) tells us that Nancy paid one statement every month. Statement (2) gives us a specific payment on a specific month. Each statement by itself is insufficient and (1) and (2) together are also insufficient since it is not mentioned that the all the payments are equal.

QUESTION 651

A map is divided into blocks. Each block is 1 inch long and 1 inch wide. Every inch on the map represents 20 miles. What is the maximum actual total distance that the Flanders family traveled?

(1) The Flanders were on three different adjacent blocks on the map. (2) The Flanders traveled in a straight line through the blocks.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is insufficient since we don't know how many times the family was in each block and how their trip looked like.

Statement (2) is also insufficient. It is not known through how many blocks the Flanders drove. Both statements together are sufficient since the longest distance traveled through three blocks is the diagonal starting at the bottom corner of the lowest block and ending at the top opposite corner of the top block. The length of this line can be calculated using the Pythagorean theorem.

QUESTION 652

The line $Y = X/2$ is drawn on a rectangular axis system. If the line is rotated, on which quadrant will he be found?

- (1) The rotation is done counter clockwise.
(2) The line is rotated 270 degrees.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Draw an axis system and draw a line from the coordinate (0, 0) in the first quadrant. From (1) we can learn that the rotation is done counter clockwise which is insufficient. From (2) we can learn that the rotation is 270 degrees, but in which way? Join the statements, we know that a 270 degrees turn counter clockwise was made and therefore the line is now in the fourth quadrant.

QUESTION 653

The line $Y = 3X$ is drawn on a rectangular axis system. If the line is rotated, on which quadrant will it be found?

- (1) The rotation is done clockwise.
- (2) The line is rotated 180 degrees.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Draw an axis system and draw a line from the coordinate (0, 0) in the first quadrant. From (1) we can learn that the rotation is done clockwise which is insufficient. From (2) we can learn that the rotation is 180 degrees, but in which way? It doesn't matter since the rotation is half a circle, which in both ways will be parallel to the original position. This statement is sufficient and the line will be in the third quadrant.

QUESTION 654

Travis parked at a certain parking lot that charges more for the first hour of parking than any other hour. If it cost Travis 5.5 dollars, how much time total did he park in the parking lot?

- (1) Parking charges are \$1.5 for the first hour and \$1 for any additional hour of parking or a part of it. (2) If the charges for the first hour were \$2 then Travis would have paid \$6 for parking.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions**Explanation****Explanation/Reference:**

Explanation:

Statement (1) gives the data on the charges but it says that every fraction of an hour is rounded up and therefore, even if Travis was 4 and 10 minutes, he still has to pay for 5 hours.

We cannot determine the exact time that Travis parked.

Statement (2) is insufficient since it doesn't change the accuracy problem introduced in (1).

More data is required.

QUESTION 655

12 liters of a certain water-based color contain A liters of water and B liters of color. How many liters of water are in the water-based color?

(1) $A^2 + 16 = 8A$.

(2) $B^2 - 2B = 48$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions**Explanation****Explanation/Reference:**

Explanation:

Statement (1) can be written as: $(A - 4)^2 = 0 \rightarrow A = 4$ and $B = 12 - 4 = 8$. Sufficient. Statement (2) can be written as: $(B + 6)(B - 8) = 0 \rightarrow B = -6$ or $B = 8$ but B must be a positive, so $B = 8 \rightarrow A = 12 - 8 = 4$.

Either statement by itself is sufficient.

QUESTION 656

From January 1948 to March 1981, the value of an antique house in the downtown area tripled. What was its value back in January 1948?

(1) From March 1981 to September 2001, the value of the house doubled. (2) The value of the house in September 2001 was \$300,000.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.

- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Use both statements and solve the problem backwards.

In 2001 the value was \$300,000, which is double the value in 1981. In 1981, the value of the house was \$150,000, which is triple the value in 1948.

In 1948, the value of the house was \$50,000.

Both statements, taken together, are sufficient.

QUESTION 657

The Ponds basketball team played 45 games this season, how many did they win?

- (1) The Ponds won their first 25 games in this season.
 - (2) The team won none of their last 5 games and of the rest they won 75%.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) only refers to the first 25 games, all the others are unknown and therefore this statement is insufficient by itself.

Statement (2) is sufficient. The rest of the games after reducing the 5 last ones that were lost is 40 games. 75% of the 40 games give 30 games that the team won.

QUESTION 658

Is X negative?

- (1) $X + 12 < 0$.
(2) $12X > 14X$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is sufficient. Subtract 12 from both sides to get $X < -12$ and therefore X is negative. Statement (2) is also sufficient. In order for the left side of the inequality to be bigger than the right side, X must be negative.

QUESTION 659

Is A an odd integer?

- (1) $AB + AC$ is an even integer.
(2) $B = 15C$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) can be written as $A(B + C)$, which means that A or $(B + C)$ must be even. Statement (2) tells you that $(B + C)$ is odd and therefore, using statement (1) A must be even.

Both statements, taken together, are sufficient.

QUESTION 660

Is Y even?

- (1) $WX + YW + ZW$ is an odd number.
- (2) $X = 8Z$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From (1) we can learn that $W(X + Y + Z)$ is odd and therefore W is odd and also $(X+Y+Z)$.

From (2) we can learn that $(X+Z)$ is even.

Use both statements together: $(X + Y + Z)$ is odd yet $(X + Z)$ is even and therefore Y must be odd.

QUESTION 661

In the past few years, the import of cars to Italy increased significantly. In the years 1994 to 2001 the number of imported cars increased by 12% each year. How many cars were imported to Italy in the year 2000?

- (1) In 1997, 12,500 cars were imported to Italy.
- (2) During the years 1997 to 1999, 42,180 cars total were shipped to Italy.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From the question we know that the number of cars grew by 12% each year. From (1) we can learn that if in 1997 12,500 cars were shipped then in 1998 ($1.12 \times 12,500$) cars were shipped and so on until 2000. This statement is sufficient. From (2) we can learn that during a certain period 42,180 cars were shipped, if you define X as the number of cars that were shipped in 1997 then: $42,180 = X + 1.2X + 1.2(1.2X)$ and so we can find X and anything else we wish to find. Either statement alone is sufficient.

QUESTION 662

Mike spends 50% of his time studying and 20% of the rest of his time going to the Jym. Jim spends 60% of his time in the Jym and 85% of the rest of his time studying. How many hours more does Mike spend on studying than Jim?

- (1) Jim spends 22 hours a week on working out.
 - (2) Mike spends 18 hours a week on studying for the finals.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

(1) Is insufficient since it gives us information regarding Jim only. (2) Is insufficient since it gives us information regarding Mike only. In order to compare the number of hours Mike and Jim spend studying, we need a real data regarding the number of hours each spends on any activity. Therefore, we need to use both statements.

QUESTION 663

A certain basketball player receives a \$700 bonus for every dunk that he performs and a \$1,000 bonus for every game that the team wins. Last month, the player earned \$9,100 on bonuses only, how many dunks did he perform last month?

- (1) Last month the player performed at least 3 dunks.
 - (2) The number of dunks, last month, was two and a half times smaller than the number of wins.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.

- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is insufficient since it gives two possible options: 13 dunks or 3 dunks and 7 wins. Statement (2) is sufficient since it eliminates all the answers but one: 7 wins and 3 dunks.

QUESTION 664

Bob earns twice as much as Bobby and Bobby earns two thirds as much as Buddy does. How much did Bob earn?

- (1) All three earn a total of 18,000 dollars.
 - (2) Buddy earns \$6,000.
-
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Pay attention, the question presents two equations with three unknowns and therefore one more equation is required in order to solve the question. Statement (1) is sufficient since it presents another equation. Statement (2) is also sufficient since it tells us one of the unknowns. Either statement alone is sufficient.

QUESTION 665

What is the value of the integer X?

- (1) $X^2 = 81$.

(2) X is a square of a prime number.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) is insufficient since X can be either 3 or 3. Statement (2) is insufficient since X can be 22, 32, ... Both statements together are sufficient since (2) eliminates the negative option of (1).

X is 3.

QUESTION 666

There are two bus routes that go through the chapel and the cemetery. For each route, the bus company may use one of two types of buses, a standard bus or a duplex bus. How many passengers total can travel in the duplex bus?

- (1) When both buses are used for the routes, as many as 90 passengers can travel from the chapel to the cemetery.
 - (2) On Saturday, the busiest day of the week, two duplex buses are used for each of the routes and as many as 120 passengers can travel from the chapel to the cemetery.
- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
 - B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
 - C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
 - D. Either statement BY ITSELF is sufficient to answer the question.
 - E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Define S as the number of passengers that can travel in the standard bus and D as the number of passengers in the duplex bus.

Statement (1) can be written as $S + D = 90$. Insufficient.

Statement (2) can be written as $2D = 120$.

Combine the statements, you got all the data you need to solve the question and therefore they are sufficient together.

QUESTION 667

What kind of flowers does a florist have more of, lilacs or roses?

(1) The number of roses he has is less than 6 times the number of lilacs that he has. (2) One fifth of the number of Lilacs is less than the number of roses that he has.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Define R as the number of roses and L as the number of lilacs. From the first statement we can write the following inequality: $R < 6L$. Both $L = 1$ and $R = 2$, $L = 2$ and $R = 1$ fit the inequality and therefore this statement is insufficient. From statement (2) we can write the following inequality: $L/5 < R$. Both $L = 1$ and $R = 2$, $L = 2$ and $R = 1$ fit the inequality and therefore this statement is insufficient. Both statements combined are also insufficient, use the same numbers to prove it and therefore more data is required.

QUESTION 668

What percent is A of B ?

- (1) B is 32 more than the square root of A .
- (2) A is more than 12 less than $B/2$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

In this question you have two unknowns, A and B, and thus you need two equations.

Statement (1) is not enough to find A and B.

Statement (2) can be written as: $A > B/2 - 12$.

The second statement is an inequality and not an equation and another equation is needed to solve the question.

QUESTION 669

The perimeter of a rectangle is 136, what is the area of the rectangle?

(1) The length is more than twice the width.

(2) The length and width are both prime numbers larger than 30.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Define L as the length and W as the width.

$2L + 2W = 136 \rightarrow L + W = 68$. We need one more equation in order to find the area. Statement (1) does not give you exact values and therefore it's not sufficient. Statement (2) tells us that both L and W are prime numbers larger than 30, using the equation in the question; the only option to get 68 is with 31 and 37. This statement is sufficient; the area is 31×37 .

QUESTION 670

If 90% of the people in Rich-Town read the Rich-Town magazin how many people read the Rich-Town news bulletin?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.

- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

No statement here tells us that all people read any magazine at all, moreover no statement gives any data regarding the News bulletin readers that do not read the Ric-Town magazine. More data is needed to solve this question.

QUESTION 671

If $Y = 2X - 10$, what is the value of Z ?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

The question presents to us one equation with two unknowns and asks about evaluating a third.

We need two more different equations.

Statement (1) and statement (2) are both independent and so combining them is sufficient.

QUESTION 672

If $Q = W + 22$, what is the value of $(Q + W)$?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.

- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We are given an equation with two unknowns and we are asked upon the sum ($Q+W$). Statement (1) is sufficient by itself without even using the data in the question, $Q + W = -86$. Statement (2) is also sufficient by itself, use the equation given in the question along with statement (2) to solve. Each of the statements is sufficient by itself.

QUESTION 673

Is $0 < Y < 1$?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From statement (1) Y can be 2 or $\frac{1}{2}$ and therefore this statement is insufficient. Statement (2) tells us that $Y > Y^2$. that is true only if Y is between zero and one. So, Statement (2) is sufficient.

QUESTION 674

Is the triangle ABC isosceles?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.

E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Draw a triangle.

From statement (1) we can conclude that angle A is 90 degrees because it is equal to half of the degrees in the triangle, this statement is not sufficient since the triangle can still be a non isosceles right triangle.

Statement (2) is also insufficient; all it tells us is that two sides are different from one another. More data is required.

QUESTION 675

Is the triangle ABC equilateral?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Let angle A be X. The sum of the angles in triangle is equal to 180 degrees. From statement (1) we can write: $X + 2X = 180 \rightarrow X = 60$. The sum of the two other angles is equal to 120, but they're not necessarily equal and therefore this statement is not sufficient alone.

Statement (2) alone is insufficient, unless the question asked if ABC is an isosceles triangle. Combine both statements; if one angle is equal to 60 and the triangle is isosceles then two of the angles must be equal to 60, the third must also be 60 and the triangle must be equilateral.

QUESTION 676

What is the sum of two angles in a triangle?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.

- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Both statements together help us know that the triangle is isosceles. We are asked upon two arbitrary angles and so we cannot determine what is their sum. More data is required.

QUESTION 677

The number of employees at the justice department tripled between 1994 and 1996. How many employees were in the department in 1994?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Define X as the number of employees in the year 1994 and Y as the number of employees in 1996.

From the question we can write that $Y = 3X$.

Statement (1) tells us that $Y = X + 12$ and so we have two equations with two unknowns. This statement is sufficient by itself.

Statement (2) adds an unnecessary parameter to the equation and therefore its insufficient.

QUESTION 678

The water level in lake Victoria increased over the last week. By what percent did the level of water increase?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.

E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We are to find the increase of the water in percent terms. Statement (1) gives us the exact amount of water that was in the lake last week. Statement (2) holds no data regarding water leaving the lake or other water being poured in.

QUESTION 679

What is the average (arithmetic mean) of X and Y?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Use the average formula: the average of X and Y is $(X+Y)/2$. Statement (1) gives us the value of XY and not $(X+Y)$ and is therefore insufficient. Statement (2) can be simplified to: $2X + 2Y = 26 \rightarrow (X+Y) = 13$. This statement is sufficient by itself.

QUESTION 680

What is the value of XY?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) can also be written as $(X - 1)^2$ and therefore $X = 1$. Statement (2) can also be written as $(Y + 4)^2$ and therefore $Y = -4$. Using both statements together, we know the value of X and Y and so we can calculate XY .

QUESTION 681

What is the value of $(X + Y)$?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) can also be written as $(X - 2)^2$ and therefore $X = 2$. Statement (2) can also be written as $(Y + 4)(Y + 2)$ and therefore the value of Y is not distinct. $(X + Y)$ can have two different values, and therefore more data is required.

QUESTION 682

At the Rocket propulsion center, hybrid missiles are being tested 4 times a day and scramjet missiles are being tested 6 times a day. If at a certain day 186 tests were held, what is the difference between the numbers of hybrid missiles to scramjet missiles that were tested?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Define H as the number of hybrid missiles and S as the number of scramjet missiles. The question lets us set up the equation: $4H + 6S = 186$. We need one more equation in order to answer the required question.

Statement (1) can be written as $H + S = 37$.

Statement (2) can be written as $S = 19$.

Either statement by itself is sufficient because it presents us with a second equation.

QUESTION 683

If red buckets can be filled with 0.5 liters of sand and blue buckets can be filled with 0.8 liters of sand, how many buckets were filled?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Define R as the number of red buckets and B as the number of blue ones. From the question and statement (1) we can write the following equation: $0.5R + 0.8B = 8$. This equation has three different solutions: (0 red and 10 blue), (0 blue and 16 red), and (5 blue and 8 red). Since it is possible to have no red or no blue buckets, all three solutions apply and there is not enough information.

From statement (2) we can write the following equation: $R = B + 3$. Combining both statements will result in two equations with two unknowns, so we can solve the question. And get the third solution only.

QUESTION 684

In order to pass the Bar exam, one should answer 65% of the answers correctly. Did Kevin pass the Bar exam?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: B

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From statement (1) we can conclude that the number of correct answers is more than 60%. This statement isn't sufficient on its own because we don't know if Kevin answered more or less than 65%. Statement (2) is sufficient, it tells us that two third (66.7%) of the questions were correct and therefore Kevin passed the test.

QUESTION 685

On an IQ exam, each correct answer grants the examinee with 3 points but every wrong answer deducts 1 points. How much did Ernst get on the IQ exam?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Define C as the number of correct answers and W as the number of wrong answers.

Statement (1) tells us that $C + W = 50$.

Statement (2) tells us that $(50 / (9+1) = 5)$ is the number of wrong answers and so 45 is the number of right ones. Using the numbers presented in the question we can answer the question of how much Ernst got. Thus, Statement (1) and (2) combined are sufficient.

QUESTION 686

Is A a multiple of B?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Rephrase the question: is A/B an integer?

Statement (1) can be written as: B/A is an integer. Take $A = 5$, $b = 10$: B/A is an integer but A/B isn't. Take $A=B=4$, $A/B = B/A$ and they are both integers and therefore this statement is insufficient. Statement (2) can be written as $2A/B$ is an integer. Take $A=10$, $B=20$: $2A/B$ is an integer but A/B isn't. Take $A=B=1$: $2A/B$ is an integer and also A/B is an integer and therefore this statement is also insufficient.

QUESTION 687

If A and B are two different two-digit numbers, is $(A + B)/2$ an integer?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

We are required to find if the sum of A and B is an even number. Statement (1) tells us that AB is odd. The multiplications of two odd numbers only will give an odd number and so A and B are both odd numbers and therefore their sum is an even number. This statement is sufficient by itself. Statement (2) is also sufficient, if the difference between two numbers is even then the numbers can either be both odds or both even. In any of the cases, their sum is even.

QUESTION 688

If X and Y are both two-digit numbers, is XY an even number?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.

E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Statement (1) isn't sufficient, X and Y can be both odd or both even, but their multiplication can be either one. Statement (2) tells us that $Y = 3X$, X and Y can both be even or odd from this statement and therefore this statement is also insufficient.

Both of the statements imply the same thing and so combining them will not help. More data is required.

QUESTION 689

Arthur and Bartholomew live in the same multi-story apartment building. How many stories does the building have?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Define A as the Arthur's floor and B as Bartholomew's floor. Using both statements, we don't know whether A is over B or the opposite and therefore we cannot determine the number of stories in the building.

If A is above B then: The number of stories is $(5+8+8 = 21)$. If B is above A then: The number of stories is $(5+3+3 = 11)$.

QUESTION 690

Comp and Calc are two companies that are located on different floors in a skyscraper. How many floors does the skyscraper have?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.

E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Using both statements we know that Comp's floor is the higher one among the two because there are only 12 floors beneath Calc's floor and therefore it must be the lower one. The number of floors in the building is $(12 + 24 + 32 = 68)$.
The combination of the two statements is sufficient.

QUESTION 691

What is the distance between Greentown to Blue town?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Draw a guiding chart with three points on it.
Statement (1) tells us nothing about Blue town and so it's insufficient. Statement (2) tells us nothing about Greentown and so it's insufficient on its own.
Even after you combine both statements, you don't know if Red town is between both cities or not. The distance from Greentown to Blue town can be 25 or 15 miles. More data is required.

QUESTION 692

How long does it take to drive from the factory to the warehouse?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.

E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From both statements we can't conclude where the location of the harbor relative to the other two places is, in other words, the harbor could be between the factory and the warehouse or it could be beyond the two.

The distance between the factory and the warehouse can be between 10 and 40 miles.

QUESTION 693

X is a prime number. Is Y odd?

(1) X is divisible by 7.

(2) YX is an even number.

A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.

B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.

C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.

D. Either statement BY ITSELF is sufficient to answer the question.

E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From statement one we conclude that $X=7$ because it's the only prime number that can be divided by 7. From statement two we conclude that if X was a odd number Y must be an even number, therefore both statements are required in order to solve the question.

QUESTION 694

Ruth's age is two-thirds of Chris's age. How old is Chris?

(1) Two years ago Ruth was half the age Chris is today.

(2) Four and a half years from now Ruth will be seven eighths of Chris's age.

A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.

- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: D

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From the question we know that R (Ruth) = (Chris). That's one equation with two variables; we need one more equation to solve the problem. Both statements are suitable equations and thus the answer is (d).

QUESTION 695

Bob is older than his brother, Jimmy. How old is Jimmy?

(1) Two years ago Jimmy was one-third of bob's age today. (2) In six years from today Bob will be three times Jimmy's age today.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Build an equation from each statement both equations are identical. Since we need two different equations to find two unknowns, we cannot solve this question.

QUESTION 696

If X is divisible by 4, is Y odd?

- (1) $Y = x + 3$.
- (2) $X = 4$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: A

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From the question one can conclude that x is even. From statement one: an even number + odd number is an odd number. Thus, y must be odd. Statement two doesn't mention y at all, and is therefore insufficient

QUESTION 697

If W is divisible by 7, is Z even or odd?

- (1) $Z = W + 1$.
- (2) $W = 7$.

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: E

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

From the question we don't know if W is even or odd ($W = 7, 14, 21, 28, \dots$) so statement one also is not helpful. From statement two we get no connection to Z so it's not sufficient either.

QUESTION 698

X , Y , Z , and W are integers. The expression $X - Y - Z$ is even and the Expression $Y - Z - W$ is odd. If X is even what must be true?

- A. Y-Z must be odd.
- B. W must be even.
- C. W must be odd.
- D. W must be even.
- E. Z must be odd

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The first expression is even and the second is odd, the only difference between the expressions is that the first expression has X and the second has W. So, if X is even W must be odd and the correct answer is C.

QUESTION 699

Q is a prime number bigger than 10. What is the smallest positive number (except 1) that 3Q can be divided by equally?

- A. 3 Q.
- B. Q
- C. 3
- D. Q+3
- E. 2Q

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

3Q is a prime number so it can be divide equally by 3Q, by 1 and by the components 3 and Q. The smallest number therefore is 3. The correct answer is C.

QUESTION 700

In a box there are green balls, $3A + 6$ red balls and 2 yellow ones. If there are no other colors, what is the probability of taking out a green or a yellow ball?

- A. $1/5$.

- B. $\frac{1}{2}$
- C. $\frac{1}{3}$
- D. $\frac{1}{4}$.
- E. $\frac{2}{3}$.

Correct Answer: D

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The number of green and yellow balls in the box is $A+2$. The total number of balls is $4A + 8$. The probability of taking out a green or a yellow ball is: $A + 2 / 4 A + 8 = 1/4$

QUESTION 701

Kelly used to get a 30% discount on movie tickets. When the price of the movie ticket increased by 50%, the amount of discount in dollars remained the same. What is Kelly's discount with the new Ticket price in percent terms?

- A. 10%
- B. 20%
- C. 25%
- D. 35%
- E. 38%

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

The price of the ticket is unknown. It would be most convenient to plug in 100 as the price of the ticket. A 30% discount of 100 is \$30, that amount remained the same after the price of a ticket increased by 50%.

The new price of a ticket is \$150, so $30/150$ is 20%. The correct answer is B.

QUESTION 702

The original price of a car was \$25,200. Because the car owner thought he could get more money for the car, he increased the price of the car to 110% of its original price. After a week, the car had not sold, so the owner then discounted the price by 10%, and the car was finally sold. What price was the car sold for?

- A. \$25,200

- B. \$25,000
- C. \$24,948
- D. \$24,542
- E. \$23,658

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Pay attention, when you raise a number by X% and then you reduce X% you don't get the original number again because the second time you took X% off you reduced it from a larger number thus answer A is not the correct one,

Let's check:

$$25,200 \times 1.1 = 27,720.$$

$$27,720 \times 0.9 = 24,948 \text{ and not } 25,200. \text{ The correct answer is C.}$$

QUESTION 703

Jasmine is the oldest member of the "Brain Storm club". If next year, the age of Sam will be two thirds that of Jasmine, what is Sam's age today?

- A. Statement (1) BY ITSELF is sufficient to answer the question, but statement (2) by itself is not.
- B. Statement (2) BY ITSELF is sufficient to answer the question, but statement (1) by itself is not.
- C. Statements (1) and (2) TAKEN TOGETHER are sufficient to answer the question, even though NEITHER statement BY ITSELF is sufficient.
- D. Either statement BY ITSELF is sufficient to answer the question.
- E. Statements (1) and (2) TAKEN TOGETHER are NOT sufficient to answer the question, requiring more data pertaining to the problem.

Correct Answer: C

Section: Data-Sufficiency Questions

Explanation

Explanation/Reference:

Explanation:

Define J as the age of Jasmine and S as the age of Sam.

The question tells us that in a year from now: $(S + 1) = \frac{2}{3} \times (J + 1)$. Statement (1) presents a new parameter, Rick's age, which is equal to Sam's age.

Statement (2) tells us that: $(X - 3) = \frac{1}{2} \times (Y - 3)$.

Using both statements, we have two equations with two unknowns.

QUESTION 704

If it takes Steve 6 hours to tile a floor and Cheryl 4 hours to tile the same floor, how long would it take both Steve and Cheryl to tile the floor if they

worked together?

- A. 2 hours 12 minutes
- B. 2 hours 24 minutes
- C. 3 hours
- D. 3 hours 12 minutes
- E. 10 hours

Correct Answer: B

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Let x = the part of the floor that can be tiled in 1 hour. Since Steve can tile a floor in 6 hours, he can tile $1/6$ of the floor in 1 hour. Since Cheryl can tile the same floor in 4 hours, she can tile $1/4$ of the floor in 1 hour. Use the equation $1/6 + 1/4 = 1/x$, where $1/x$ represents the part of the floor they can tile in an hour together. Multiply each term by the LCD = $12x$. $12x \times 1/6 + 12x \times 1/4 = 12x \times 1/x$. The equation simplifies to $2x + 3x = 12$. $5x = 12$. Divide each side by 5 to get $x = 12/5 = 2.4$ hours. Since 0.4 times 60 minutes equals 24 minutes, the final answer is 2 hours 24 minutes.

QUESTION 705

In a chocolate store, there are vanilla and chocolate flavor bon-bons only. 10% of the bon-bons are chocolate flavored, 90% of the rest are squashed. What percentage of the bon-bons is vanilla flavored that are not squashed?

- A. 1%
- B. 5%
- C. 9%
- D. 10%
- E. 2%

Correct Answer: C

Section: Problem-Solving Questions

Explanation

Explanation/Reference:

Explanation:

Pick a number of bon-bons, like 100 for example.

10 are chocolate, 90% of the rest ($0.9 \times 90 = 81$) are squashed. That means that only 9 are vanilla and are not squashed.

Verbal-Ability

QUESTION 1

The labor market is changing yet again. Increasingly, American business is turning to interim staffing to cover a greater number of its employment vacancies. Once interim (or temporary) staffing was reserved for the lower-level positions requiring little training, such as an envelope stuffer, receptionist, day laborer, and the like. Today, however, a more highly trained professional is being sought for interim work. It is not uncommon to find computer programmers, writers, marketing professionals, CPAs, and even chief financial officers working in an interim capacity. The reasons for these changes in staffing norms are generated at both the employer and employee level. Employers are pushing the drive toward interim staffing in order to maintain maximum flexibility. Companies can be more innovative and flexible in their planning cycles if they have the option to hire employees on an as-needed basis. Additionally, employers save money using interim staffers, as they are not required to provide health insurance to temporary workers and they are not obligated to pay severance when the job terminates. Employees, too, are pushing the trend toward interim staffing. Increasingly, professionals are seeking more flexibility in their work schedules--often in response to family obligations. No longer does the permanent 9 to 5, Monday through Friday schedule work for everyone. By working interim, employees can work when it fits their schedules. However, interim staffing is not for everyone. Organizations whose workflow requires continuity of personnel may find interim staffing an impediment to productivity. Likewise, employees who need a steady source of income or who require the health insurance and other benefits provided by permanent employers may find the unpredictability in interim work problematic.

The main purpose of this passage is to

- A. convince employers to use interim staffing.
- B. explain the difference between temporary and permanent staffing.
- C. explain which companies benefit most from interim staffing.
- D. explain why interim staffing has become popular with employers and employees.
- E. convince employers that interim employees also deserve health benefits.

Correct Answer: D

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

Although the passage describes the benefits of interim staffing, it does not attempt to persuade employers to use interim staffing (choice a). It is clear from the first paragraph that the passage is explanatory in nature. The last sentence--"The reasons for these changes in staffing norms are generated at both the employer and employee level"--tells us that the passage will explain how employers and employees are driving the increase in interim staffing. The differences between temporary and permanent staffing are briefly discussed (choice b), but these are details of the passage, not its main point. Likewise, the kinds of companies that benefit from interim staffing are briefly discussed (choice c), but they are also details within the passage. One of the differences noted is that interim staffers do not get benefits, but the author does not attempt to persuade employers to provide benefits to interim staff (choice e).

QUESTION 2

The labor market is changing yet again. Increasingly, American business is turning to interim staffing to cover a greater number of its employment

vacancies. Once interim (or temporary) staffing was reserved for the lower-level positions requiring little training, such as an envelope stuffer, receptionist, day laborer, and the like. Today, however, a more highly trained professional is being sought for interim work. It is not uncommon to find computer programmers, writers, marketing professionals, CPAs, and even chief financial officers working in an interim capacity. The reasons for these changes in staffing norms are generated at both the employer and employee level. Employers are pushing the drive toward interim staffing in order to maintain maximum flexibility. Companies can be more innovative and flexible in their planning cycles if they have the option to hire employees on an as-needed basis. Additionally, employers save money using interim staffers, as they are not required to provide health insurance to temporary workers and they are not obligated to pay severance when the job terminates. Employees, too, are pushing the trend toward interim staffing. Increasingly, professionals are seeking more flexibility in their work schedules--often in response to family obligations. No longer does the permanent 9 to 5, Monday through Friday schedule work for everyone. By working interim, employees can work when it fits their schedules. However, interim staffing is not for everyone. Organizations whose workflow requires continuity of personnel may find interim staffing an impediment to productivity. Likewise, employees who need a steady source of income or who require the health insurance and other benefits provided by permanent employers may find the unpredictability in interim work problematic.

Given the author's purpose, which of the following would most enhance this passage?

- A. an interview with an interim employee
- B. statistics illustrating the increased emphasis on interim staffing
- C. a discussion of whether interim employees deserve benefits
- D. examples of positions that are not good for interim employees
- E. statistics illustrating how much a company can save by using interim employees

Correct Answer: B

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The focus of the passage is the change in the labor market, and the goal is to explain this change, so statistics illustrating the change would significantly enhance the text. An interview with an interim employee (choice a) would be interesting and relevant, but it would not enhance the main goal as much as choice b. Again, because the passage does not argue whether interim employees should have benefits, choice c is incorrect. Choice d would add a minor detail to the passage that would not enhance the text as much as choice b. According to the passage, flexibility in hiring is the main benefit of interim staffing, not cost savings, so choice e is not the best choice.

QUESTION 3

The labor market is changing yet again. Increasingly, American business is turning to interim staffing to cover a greater number of its employment vacancies. Once interim (or temporary) staffing was reserved for the lower-level positions requiring little training, such as an envelope stuffer, receptionist, day laborer, and the like. Today, however, a more highly trained professional is being sought for interim work. It is not uncommon to find computer programmers, writers, marketing professionals, CPAs, and even chief financial officers working in an interim capacity. The reasons for these changes in staffing norms are generated at both the employer and employee level. Employers are pushing the drive toward interim staffing in order to maintain maximum flexibility. Companies can be more innovative and flexible in their planning cycles if they have the option to hire employees on an as-needed basis. Additionally, employers save money using interim staffers, as they are not required to provide health insurance to temporary workers and

they are not obligated to pay severance when the job terminates. Employees, too, are pushing the trend toward interim staffing. Increasingly, professionals are seeking more flexibility in their work schedules--often in response to family obligations. No longer does the permanent 9 to 5, Monday through Friday schedule work for everyone. By working interim, employees can work when it fits their schedules. However, interim staffing is not for everyone. Organizations whose workflow requires continuity of personnel may find interim staffing an impediment to productivity. Likewise, employees who need a steady source of income or who require the health insurance and other benefits provided by permanent employers may find the unpredictability in interim work problematic.

From the passage, it can be inferred that

- A. interim employment is appealing to many segments of the labor market.
- B. interim employees are often less qualified than permanent employees.
- C. because of cost savings, interim employees will eventually overtake most permanent positions.
- D. because of scheduling flexibility, more permanent employees will opt for interim positions.
- E. interim staffing is itself a temporary solution to fluctuations in the labor market.

Correct Answer: A

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The passage gives a wide range of examples of interim positions--from receptionists to CFOs--so this is the most logical conclusion. Nothing suggests that interim employees are less qualified (indeed, the passage states that "a more highly trained professional is being sought for interim work"), so choice b is incorrect. The passage does not attempt to predict whether the trend toward interim staffing is already at its peak or whether it will continue to gain momentum, so choices c and d are incorrect. The passage focuses on interim staffing as a solution to the personal needs of employees and the flexibility and budgeting needs of employers, so choice e is incorrect.

QUESTION 4

Today, children whose parents are deemed incapable of caring for them are put into foster care. These children are moved into strangers' homes, where they are cared for until their own parents can regain custody, which may not happen for years, if it happens at all. Although it means well, the current foster care program is so poorly funded, staffed, and managed that it cannot ensure the safety and well being of the children in the system. The laudable idea behind foster care is that children will fare best if placed in a family setting until they can be reunited with their parents, even if it is a family of strangers. However while in foster care, children typically get shuffled between many different foster homes, preventing them from developing long-term, supportive relationships with their foster families. Foster care placements can also force siblings to be separated, further isolating these vulnerable children. When a child is moved to a new foster home, he or she may also have to enroll in a new school, a disruptive process that has a negative impact on the child's education. The bureaucracy that oversees this system is overwhelmed to the point that social workers are unable to adequately screen potential foster parents and keep accurate track of the children placed in foster care. There must be a better means of caring for these children. Perhaps it is time to consider creating special group homes as a means of providing these children with stable and safe environments. A child could live in one group home for the duration of his or her time in foster care and be supervised by a team of social workers and other lay people. Children would receive proper meals and healthcare, attend the same school, and develop relationships with others experiencing the trauma of being separated from their parents. In addition, social workers and staff would have daily access to these children, enabling them to better determine if a child has a special

physical or psychological need and arrange for the necessary services. Would this approach be perfect? No, but it would solve many of the problems that plague the current system. For some, the idea of a government agency housing, clothing, and feeding needy children may sound extreme, but it only suggests that we provide these children with the same basic necessities that we give to prison inmates.

Which of the following best expresses the main idea of this passage?

- A. The current foster care system is a failure.
- B. Government-run group homes would be a better option than foster care.
- C. Group homes for children are similar to prisons.
- D. Children in foster care need more stability.
- E. No childcare system is perfect.

Correct Answer: B

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The main idea is expressed at the beginning of the third paragraph: "Perhaps it's time to consider creating special group homes as a means of providing these children with stable and safe environments." The first two paragraphs describe the problems with foster care, whereas the last two show how group homes would address those problems. The passage does argue that the current foster care system is at least to some extent a failure (choice a), but that is part of the larger argument that something else must be done. The passage refers to prisons in the last paragraph, but this is to compare the treatment of children in foster care with the treatment of inmates in prison, not to compare group homes to prisons (choice c). The passage argues that children in foster care need more stability (choice d), but this is one of the supporting ideas, not the main idea. The author may feel that no system is perfect (choice e) and acknowledges that group homes are not a perfect solution, but again, this is a detail within the passage, not the overall main idea.

QUESTION 5

Today, children whose parents are deemed incapable of caring for them are put into foster care. These children are moved into strangers' homes, where they are cared for until their own parents can regain custody, which may not happen for years, if it happens at all. Although it means well, the current foster care program is so poorly funded, staffed, and managed that it cannot ensure the safety and well being of the children in the system. The laudable idea behind foster care is that children will fare best if placed in a family setting until they can be reunited with their parents, even if it is a family of strangers. However while in foster care, children typically get shuffled between many different foster homes, preventing them from developing long-term, supportive relationships with their foster families. Foster care placements can also force siblings to be separated, further isolating these vulnerable children. When a child is moved to a new foster home, he or she may also have to enroll in a new school, a disruptive process that has a negative impact on the child's education. The bureaucracy that oversees this system is overwhelmed to the point that social workers are unable to adequately screen potential foster parents and keep accurate track of the children placed in foster care. There must be a better means of caring for these children. Perhaps it is time to consider creating special group homes as a means of providing these children with stable and safe environments. A child could live in one group home for the duration of his or her time in foster care and be supervised by a team of social workers and other lay people. Children would receive proper meals and healthcare, attend the same school, and develop relationships with others experiencing the trauma of being separated from their parents. In addition, social workers and staff would have daily access to these children, enabling them to better determine if a child has a special physical or psychological need and arrange for the necessary services. Would this approach be perfect? No, but it would solve many of the problems

that plague the current system. For some, the idea of a government agency housing, clothing, and feeding needy children may sound extreme, but it only suggests that we provide these children with the same basic necessities that we give to prison inmates.

According to the passage, a group home system has all of the following advantages over the current foster care system EXCEPT

- A. children would be reunited with their parents more quickly.
- B. it is easier to keep track of children in the system.
- C. children would have daily contact with social workers.
- D. children would stay in the same school.
- E. children would have better access to special services.

Correct Answer: A

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The third paragraph lists the advantages that a group home system would have over foster care. The passage doesn't mention that group homes would enable children to be reunited more quickly with their parents (choice a), a factor that is unaffected by either foster care or group homes. The paragraph specifically mentions the other benefits listed in choices b through e.

QUESTION 6

Today, children whose parents are deemed incapable of caring for them are put into foster care. These children are moved into strangers' homes, where they are cared for until their own parents can regain custody, which may not happen for years, if it happens at all. Although it means well, the current foster care program is so poorly funded, staffed, and managed that it cannot ensure the safety and well being of the children in the system. The laudable idea behind foster care is that children will fare best if placed in a family setting until they can be reunited with their parents, even if it is a family of strangers. However while in foster care, children typically get shuffled between many different foster homes, preventing them from developing long-term, supportive relationships with their foster families. Foster care placements can also force siblings to be separated, further isolating these vulnerable children. When a child is moved to a new foster home, he or she may also have to enroll in a new school, a disruptive process that has a negative impact on the child's education. The bureaucracy that oversees this system is overwhelmed to the point that social workers are unable to adequately screen potential foster parents and keep accurate track of the children placed in foster care. There must be a better means of caring for these children. Perhaps it is time to consider creating special group homes as a means of providing these children with stable and safe environments. A child could live in one group home for the duration of his or her time in foster care and be supervised by a team of social workers and other lay people. Children would receive proper meals and healthcare, attend the same school, and develop relationships with others experiencing the trauma of being separated from their parents. In addition, social workers and staff would have daily access to these children, enabling them to better determine if a child has a special physical or psychological need and arrange for the necessary services. Would this approach be perfect? No, but it would solve many of the problems that plague the current system. For some, the idea of a government agency housing, clothing, and feeding needy children may sound extreme, but it only suggests that we provide these children with the same basic necessities that we give to prison inmates.

The passage suggests that the idea of creating group homes in lieu of foster care

- A. is long overdue.

- B. is the only viable option to foster care.
- C. is likely to meet with much resistance.
- D. should be researched extensively.
- E. is a basic right that should not be denied to children in need.

Correct Answer: C

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

In the last paragraph, the author acknowledges that "For some, the idea of a government agency housing, clothing, and feeding needy children may sound extreme." This suggests that the idea will be resisted. The author does not appear to think that this idea is long overdue (choice a); the author says "perhaps it is time" to consider group homes, not "it is high time" or some other phrase that would suggest impatience. The author is not close-minded enough to suggest that group homes are the only option (choice b). The statement "There must be a better means of caring for these children" and the word "perhaps" indicate that the author is thinking about options and possibilities. The author would probably agree that the idea of creating group homes should be researched (choice d), but the passage does not indicate this point. Finally, the author suggests that the basic rights that should not be denied to children are food, clothes, and shelter--not orphanages themselves, so choice e is incorrect.

QUESTION 7

Today, children whose parents are deemed incapable of caring for them are put into foster care. These children are moved into strangers' homes, where they are cared for until their own parents can regain custody, which may not happen for years, if it happens at all. Although it means well, the current foster care program is so poorly funded, staffed, and managed that it cannot ensure the safety and well being of the children in the system. The laudable idea behind foster care is that children will fare best if placed in a family setting until they can be reunited with their parents, even if it is a family of strangers. However while in foster care, children typically get shuffled between many different foster homes, preventing them from developing long-term, supportive relationships with their foster families. Foster care placements can also force siblings to be separated, further isolating these vulnerable children. When a child is moved to a new foster home, he or she may also have to enroll in a new school, a disruptive process that has a negative impact on the child's education. The bureaucracy that oversees this system is overwhelmed to the point that social workers are unable to adequately screen potential foster parents and keep accurate track of the children placed in foster care. There must be a better means of caring for these children. Perhaps it is time to consider creating special group homes as a means of providing these children with stable and safe environments. A child could live in one group home for the duration of his or her time in foster care and be supervised by a team of social workers and other lay people. Children would receive proper meals and healthcare, attend the same school, and develop relationships with others experiencing the trauma of being separated from their parents. In addition, social workers and staff would have daily access to these children, enabling them to better determine if a child has a special physical or psychological need and arrange for the necessary services. Would this approach be perfect? No, but it would solve many of the problems that plague the current system. For some, the idea of a government agency housing, clothing, and feeding needy children may sound extreme, but it only suggests that we provide these children with the same basic necessities that we give to prison inmates.

It can be inferred from the passage that the author

- A. was once in prison.
- B. believes foster care parents are often too lenient.

- C. was a foster child.
- D. believes prison inmates are treated better than some children in foster care.
- E. believes group homes are essentially prisons for children.

Correct Answer: D

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The final sentence suggests that prison inmates--who are provided with food, shelter, and clothing-- are sometimes better cared for than children in foster care, who may not get the attention and care they need for their physical and emotional well being. Nothing states that the author was in prison (choice a) or was a foster child (choice c). The author also does not suggest that foster parents are often too lenient (choice b). Because the author is advocating the creation of group homes to provide better care than the current foster care system, choice e is also incorrect.

QUESTION 8

Today, children whose parents are deemed incapable of caring for them are put into foster care. These children are moved into strangers' homes, where they are cared for until their own parents can regain custody, which may not happen for years, if it happens at all. Although it means well, the current foster care program is so poorly funded, staffed, and managed that it cannot ensure the safety and well being of the children in the system. The laudable idea behind foster care is that children will fare best if placed in a family setting until they can be reunited with their parents, even if it is a family of strangers. However while in foster care, children typically get shuffled between many different foster homes, preventing them from developing long-term, supportive relationships with their foster families. Foster care placements can also force siblings to be separated, further isolating these vulnerable children. When a child is moved to a new foster home, he or she may also have to enroll in a new school, a disruptive process that has a negative impact on the child's education. The bureaucracy that oversees this system is overwhelmed to the point that social workers are unable to adequately screen potential foster parents and keep accurate track of the children placed in foster care. There must be a better means of caring for these children. Perhaps it is time to consider creating special group homes as a means of providing these children with stable and safe environments. A child could live in one group home for the duration of his or her time in foster care and be supervised by a team of social workers and other lay people. Children would receive proper meals and healthcare, attend the same school, and develop relationships with others experiencing the trauma of being separated from their parents. In addition, social workers and staff would have daily access to these children, enabling them to better determine if a child has a special physical or psychological need and arrange for the necessary services. Would this approach be perfect? No, but it would solve many of the problems that plague the current system. For some, the idea of a government agency housing, clothing, and feeding needy children may sound extreme, but it only suggests that we provide these children with the same basic necessities that we give to prison inmates.

The passage states that

- A. children in group homes would get a better education than children in foster care.
- B. children in group homes would have more individual attention than children in foster care.
- C. children in group homes would find comfort in being with other children who have been taken from their parents.
- D. group homes are more cost effective than foster care.
- E. a group home system is less likely to be bogged down by bureaucracy.

Correct Answer: C

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

Listed among the benefits of a group home is the fact that children would "develop relationships with others experiencing the trauma of being separated from their parents." This suggests that children would find comfort in being with others in similar circumstances. This inference is especially logical given the passage's emphasis in the second paragraph on how foster care isolates children who have been taken from their parents. The passage does not mention the quality of education that would be provided to children in group homes, so choice a is incorrect. Choice b is incorrect because the author does not state how much attention children would get in the group home and because there is no standard for how much attention children get in foster care (some likely get inordinate amounts of attention, whereas others are neglected). The cost of either childcare option is not discussed, so choice d is incorrect. Finally, because the passage does not discuss the management of the group home system, and because it is logical to conclude that a government-run group home system would also be heavily bureaucratic in nature, choice e is also incorrect.

QUESTION 9

Polycystic ovarian syndrome, or PCOS (aka Stein-Leventhal disease), is a condition that affects between 6% and 20% of women in the United States. It is a little understood syndrome that often goes undetected and is frequently misdiagnosed. PCOS produces tiny cysts on the surface of a woman's ovaries. These cysts are undeveloped follicles (eggs) that inexplicably fail to release through the ovarian wall as part of the menstrual cycle. Some researchers believe the eggs fail to release from the ovary because of the presence of male hormones in the blood. However, new research is indicating that PCOS is related to insulin resistance. Unfortunately, the cysts themselves are only a small part of this syndrome. PCOS can present a variety of symptoms, including hair growth on the face and chest, stubborn acne, hair loss, obesity, irregular menses, infertility, and an increased risk of diabetes. Many of these symptoms impact a woman's physical appearance and her self-esteem. If left untreated, women suffering from PCOS may experience greater levels of stress and depression. A woman exhibiting any of these symptoms should contact her physician to determine if she has PCOS. Although there is no cure for PCOS, a number of different treatments can stop or reverse many of the symptoms.

According to the passage, many women who have PCOS

- A. are unable to have children.
- B. have an excess of male hormones in their blood.
- C. overreact to the symptoms.
- D. cannot afford proper treatment.
- E. do not even know they have the disease.

Correct Answer: E

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The second sentence says that PCOS is "little understood" and "often goes undetected and is frequently misdiagnosed." Thus, many women who have the syndrome do not even know they have it. One symptom of PCOS is infertility, but not all women who have PCOS are infertile, so choice a, is incorrect. The passage tells us that new research has debunked the theory that male hormones in the blood cause the disease, so choice b is incorrect. Nothing in the passage suggests that women who have the syndrome overreact (choice c) or cannot afford treatment (choice d).

QUESTION 10

Polycystic ovarian syndrome, or PCOS (aka Stein-Leventhal disease), is a condition that affects between 6% and 20% of women in the United States. It is a little understood syndrome that often goes undetected and is frequently misdiagnosed. PCOS produces tiny cysts on the surface of a woman's ovaries. These cysts are undeveloped follicles (eggs) that inexplicably fail to release through the ovarian wall as part of the menstrual cycle. Some researchers believe the eggs fail to release from the ovary because of the presence of male hormones in the blood. However, new research is indicating that PCOS is related to insulin resistance. Unfortunately, the cysts themselves are only a small part of this syndrome. PCOS can present a variety of symptoms, including hair growth on the face and chest, stubborn acne, hair loss, obesity, irregular menses, infertility, and an increased risk of diabetes. Many of these symptoms impact a woman's physical appearance and her self-esteem. If left untreated, women suffering from PCOS may experience greater levels of stress and depression. A woman exhibiting any of these symptoms should contact her physician to determine if she has PCOS. Although there is no cure for PCOS, a number of different treatments can stop or reverse many of the symptoms.

The passage suggests that the most damaging aspect of misdiagnosed or untreated PCOS is often

- A. infertility caused by the cysts.
- B. health problems caused by weight gain.
- C. psychological ailments, including anxiety and depression.
- D. skin rashes and acne.
- E. the sudden onset of diabetes.

Correct Answer: C

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The second paragraph discusses the symptoms and complications of the disease. Notice how the author lists seven physical symptoms in just one sentence, whereas two full sentences are devoted to psychological issues: the impact of these symptoms on a woman's self-esteem and the stress and depression caused by the symptoms. Infertility (choice a), obesity and its attendant problems (choice b), and skin rashes and acne (choice d) are all physical symptoms listed in the first sentence of the second paragraph. Choice e is incorrect because the syndrome does not cause the sudden onset of diabetes; it only creates "an increased risk of diabetes."

QUESTION 11

Polycystic ovarian syndrome, or PCOS (aka Stein-Leventhal disease), is a condition that affects between 6% and 20% of women in the United States. It is a little understood syndrome that often goes undetected and is frequently misdiagnosed. PCOS produces tiny cysts on the surface of a woman's ovaries. These cysts are undeveloped follicles (eggs) that inexplicably fail to release through the ovarian wall as part of the menstrual cycle. Some researchers believe the eggs fail to release from the ovary because of the presence of male hormones in the blood. However, new research is indicating

that PCOS is related to insulin resistance. Unfortunately, the cysts themselves are only a small part of this syndrome. PCOS can present a variety of symptoms, including hair growth on the face and chest, stubborn acne, hair loss, obesity, irregular menses, infertility, and an increased risk of diabetes. Many of these symptoms impact a woman's physical appearance and her self-esteem. If left untreated, women suffering from PCOS may experience greater levels of stress and depression. A woman exhibiting any of these symptoms should contact her physician to determine if she has PCOS. Although there is no cure for PCOS, a number of different treatments can stop or reverse many of the symptoms

The author implies that PCOS is often misdiagnosed because

- A. doctors often ignore the symptoms.
- B. many symptoms could be symptomatic of many other
- C. insufficient attention is given to women's healthcare
- D. the symptoms are similar to the symptoms of diabetes.
- E. doctors believe the symptoms are psychosomatic.

Correct Answer: B

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

Because PCOS is "little understood" and because so many varied symptoms could also be symptoms of other ailments, the disease is often misdiagnosed. The passage does not suggest that doctors ignore the symptoms (choice a), that doctors believe the symptoms are psychosomatic (choice e), or that not enough attention is given to women's health issues (choice c). The symptoms of PCOS symptoms are not compared to the symptoms of diabetes, so choice d is incorrect.

QUESTION 12

On May 5th, 1997, the European edition of Business Tech Magazine led with Hoffman's cover story "Internet Communities: How they're Shaping Electronic Commerce". This cover story highlights the extent to which the term virtual community has become almost synonymous with various forms of group-CMCs (computer mediated communication), including email-list forums, chat-systems such as IRC, web-based discussion areas and UseNet news-groups. There was no debate in the Business Tech Magazine article as to whether the group-CMC discussions are really 'communities', rather how community as opposed to content can be used to encourage people to return to a particular part of cyberspace for commercial gain. In a similar vein, Simpson and Armstrong in "Internet Gain" argue that ignoring virtual communities would be a great loss of a marketing tool for businesses. They define virtual communities as computer mediated space where there is an integration of content and communication with an emphasis on member-generated content. Not all virtual community commentators agree with the Spartan position taken by Hoffman. Rheingold, one of the prime popularizers of the term virtual community, provides us with a more emotive definition in his book *The Virtual Community: Homesteading on the Electronic Frontier*. According to Rheingold, "virtual communities are social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace". Rheingold's definition is extremely popular and has been quoted in many discussions about virtual communities. As discussed below, for social scientists, particularly sociologists, Rheingold's definition raises many issues, especially concerning the notion of community. This is because Rheingold argues via a variety of analogies from the real world such as homesteading that virtual communities are indeed new forms of "community". In fact, Rheingold implies that virtual communities are actually "a kind of ultimate flowering of community". Moreover, Rheingold maintains that whenever computer mediated communications technology becomes available;

people inevitably create communities with it. Rheingold can thus be labeled as a technological determinist as he holds that there is a predictable relationship between technology and people's behavior. The debate over the validity of Rheingold's position has raised doubts about the existence of virtual communities and the appropriate use of the term. Weinreich claims that the idea of virtual communities must be wrong because community is a collective of kinship networks that share a common geographic region, a common history, and a shared value system, usually rooted in a common religion. In other words, Weinreich rejects the existence of virtual communities because group-CMC discussions cannot possibly meet his definition. In Weinreich's view, anyone with even a basic knowledge of sociology understands that information exchange in no way constitutes a community.

The primary purpose of the passage is to

- A. suggest an alternate definition for the term virtual communities
- B. challenge the validity of group-CMCs in the virtual community
- C. discuss whether group-CMCs constitute real communities
- D. present two opposing hypotheses and presents research and evidence to support them
- E. emphasize the unsuitability of traditional definitions of community in light of the recent establishment of virtual communities on the Net

Correct Answer: C

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The passage begins by presenting the viewpoint of those that believe that group-CMCs are true communities and continues by presenting an opposing view. D is incorrect because definitions, not hypotheses are discussed in the passage.

QUESTION 13

On May 5th, 1997, the European edition of Business Tech Magazine led with Hoffman's cover story "Internet Communities: How they're Shaping Electronic Commerce". This cover story highlights the extent to which the term virtual community has become almost synonymous with various forms of group-CMCs (computer mediated communication), including email-list forums, chat-systems such as IRC, web-based discussion areas and UseNet news-groups. There was no debate in the Business Tech Magazine article as to whether the group-CMC discussions are really 'communities', rather how community as opposed to content can be used to encourage people to return to a particular part of cyberspace for commercial gain. In a similar vein, Simpson and Armstrong in "Internet Gain" argue that ignoring virtual communities would be a great loss of a marketing tool for businesses. They define virtual communities as computer mediated space where there is an integration of content and communication with an emphasis on member-generated content. Not all virtual community commentators agree with the Spartan position taken by Hoffman. Rheingold, one of the prime popularizers of the term virtual community, provides us with a more emotive definition in his book *The Virtual Community: Homesteading on the Electronic Frontier*. According to Rheingold, "virtual communities are social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace". Rheingold's definition is extremely popular and has been quoted in many discussions about virtual communities. As discussed below, for social scientists, particularly sociologists, Rheingold's definition raises many issues, especially concerning the notion of community. This is because Rheingold argues via a variety of analogies from the real world such as homesteading that virtual communities are indeed new forms of "community". In fact, Rheingold implies that virtual communities are actually "a kind of ultimate flowering of community". Moreover, Rheingold maintains that whenever computer mediated communications technology becomes available; people inevitably create communities with it. Rheingold can thus be labeled as a technological determinist as he holds that there is a predictable

relationship between technology and people's behavior. The debate over the validity of Rheingold's position has raised doubts about the existence of virtual communities and the appropriate use of the term. Weinreich claims that the idea of virtual communities must be wrong because community is a collective of kinship networks that share a common geographic region, a common history, and a shared value system, usually rooted in a common religion. In other words, Weinreich rejects the existence of virtual communities because group-CMC discussions cannot possibly meet his definition. In Weinreich's view, anyone with even a basic knowledge of sociology understands that information exchange in no way constitutes a community.

According to Simpson and Armstrong, virtual communities

- A. are not as effective as content in encouraging people to return to a particular part of the Internet.
- B. emphasize attracting new members through their use of absorbing content
- C. are not really communities, but simply group-CMC discussions
- D. has become almost synonymous with various forms of group-CMCs
- E. are an invaluable marketing tool for businesses.

Correct Answer: E

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

According to Simpson and Armstrong ignoring virtual communities would be a loss. In other word, virtual communities are invaluable. The word invaluable means very useful.

QUESTION 14

On May 5th, 1997, the European edition of Business Tech Magazine led with Hoffman's cover story "Internet Communities: How they're Shaping Electronic Commerce". This cover story highlights the extent to which the term virtual community has become almost synonymous with various forms of group-CMCs (computer mediated communication), including email-list forums, chat-systems such as IRC, web-based discussion areas and UseNet news-groups. There was no debate in the Business Tech Magazine article as to whether the group-CMC discussions are really 'communities', rather how community as opposed to content can be used to encourage people to return to a particular part of cyberspace for commercial gain. In a similar vein, Simpson and Armstrong in "Internet Gain" argue that ignoring virtual communities would be a great loss of a marketing tool for businesses. They define virtual communities as computer mediated space where there is an integration of content and communication with an emphasis on member-generated content. Not all virtual community commentators agree with the Spartan position taken by Hoffman. Rheingold, one of the prime popularizers of the term virtual community, provides us with a more emotive definition in his book *The Virtual Community: Homesteading on the Electronic Frontier*. According to Rheingold, "virtual communities are social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace". Rheingold's definition is extremely popular and has been quoted in many discussions about virtual communities. As discussed below, for social scientists, particularly sociologists, Rheingold's definition raises many issues, especially concerning the notion of community. This is because Rheingold argues via a variety of analogies from the real world such as homesteading that virtual communities are indeed new forms of "community". In fact, Rheingold implies that virtual communities are actually "a kind of ultimate flowering of community". Moreover, Rheingold maintains that whenever computer mediated communications technology becomes available; people inevitably create communities with it. Rheingold can thus be labeled as a technological determinist as he holds that there is a predictable relationship between technology and people's behavior. The debate over the validity of Rheingold's position has raised doubts about the existence of

virtual communities and the appropriate use of the term. Weinreich claims that the idea of virtual communities must be wrong because community is a collective of kinship networks that share a common geographic region, a common history, and a shared value system, usually rooted in a common religion. In other words, Weinreich rejects the existence of virtual communities because group-CMC discussions cannot possibly meet his definition. In Weinreich's view, anyone with even a basic knowledge of sociology understands that information exchange in no way constitutes a community. Weinreich rejects Rheingold's inclusion of virtual communities in the definition of communities for all of the following reasons EXCEPT

- A. virtual communities do not usually exchange information
- B. virtual communities do not usually share the same territory
- C. virtual communities do not usually share values
- D. virtual communities do not usually share a common history
- E. virtual communities are not usually rooted in a common religion

Correct Answer: A

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The question asks you to identify what does NOT stop Weinreich from considering a virtual community a real community. An exchange of information is not problematic for Weinreich.

QUESTION 15

On May 5th, 1997, the European edition of Business Tech Magazine led with Hoffman's cover story "Internet Communities: How they're Shaping Electronic Commerce". This cover story highlights the extent to which the term virtual community has become almost synonymous with various forms of group-CMCs (computer mediated communication), including email-list forums, chat-systems such as IRC, web-based discussion areas and UseNet news-groups. There was no debate in the Business Tech Magazine article as to whether the group-CMC discussions are really 'communities', rather how community as opposed to content can be used to encourage people to return to a particular part of cyberspace for commercial gain. In a similar vein, Simpson and Armstrong in "Internet Gain" argue that ignoring virtual communities would be a great loss of a marketing tool for businesses. They define virtual communities as computer mediated space where there is an integration of content and communication with an emphasis on member-generated content. Not all virtual community commentators agree with the Spartan position taken by Hoffman. Rheingold, one of the prime popularizers of the term virtual community, provides us with a more emotive definition in his book *The Virtual Community: Homesteading on the Electronic Frontier*. According to Rheingold, "virtual communities are social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace". Rheingold's definition is extremely popular and has been quoted in many discussions about virtual communities. As discussed below, for social scientists, particularly sociologists, Rheingold's definition raises many issues, especially concerning the notion of community. This is because Rheingold argues via a variety of analogies from the real world such as homesteading that virtual communities are indeed new forms of "community". In fact, Rheingold implies that virtual communities are actually "a kind of ultimate flowering of community". Moreover, Rheingold maintains that whenever computer mediated communications technology becomes available; people inevitably create communities with it. Rheingold can thus be labeled as a technological determinist as he holds that there is a predictable relationship between technology and people's behavior. The debate over the validity of Rheingold's position has raised doubts about the existence of virtual communities and the appropriate use of the term. Weinreich claims that the idea of virtual communities must be wrong because community is a collective of kinship networks that share a common geographic region, a common history, and a shared value system, usually rooted in a common

religion. In other words, Weinreich rejects the existence of virtual communities because group-CMC discussions cannot possibly meet his definition. In Weinreich's view, anyone with even a basic knowledge of sociology understands that information exchange in no way constitutes a community

The author says 'there was no debate in the Business Tech Magazine article' to emphasize which of the following points?

- A. It is not content but community that can be used to entice the public to go back to a commercial website
- B. It is not community but content that can be used to entice the public to go back to a commercial website
- C. It would be a great loss of a business-marketing tool if virtual communities were ignored.
- D. There are various forms of group-CMCs, including email-list forums, chat-systems, web-based discussion areas and UseNet news-groups.
- E. Business Tech Magazine had already assumed that group-CMCs are communities.

Correct Answer: E

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The passage discusses whether group-CMCs are communities. Business Tech Magazine does not debate this issue because it has already assumed that they are.

QUESTION 16

Take a very commonplace, often discussed and critical topic: Are we detecting a greenhouse effect, and related to this, is it exacerbated by "homogenic factors," i.e., human actions? Most would be inclined to give a positive answer to both of these questions. But, if pushed, what would be the evidence, and how well grounded would it be for such affirmations?

Within scientific communities and associated scientifically informed circles, the answers have to be somewhat more ambiguous, particularly when rigorous questions concerning evidence are raised. Were scientific truth to be a matter of consensus, and some argue that scientific truth often turns out to be just that, then it is clear that there is beginning to be a kind of majority consensus among many earth science practitioners that the temperature of the Earth, particularly of the oceans, is indeed rising and that this is a crucial indicator for a possible greenhouse effect. Most of these scientists admit that the mean oceanic temperature has risen globally in the last several decades. But this generalization depends upon how accurate measurements may be, not just for samples, but also for the whole Earth. A hot spot, for example the now four year old hot spot near New Guinea which is part of the El Niño cycle, does not count by itself because it might be balanced by cold spots elsewhere. And the fact of the matter is that "whole earth measurements" are still rare and primitive in the simple sense that we simply do not have enough thermometers out. Secondly, even if we had enough thermometers, a simply synchronic whole earth measurement over three decades is but a blip in the diachronic history of ice age cycles over the last tens of thousands of years. Thirdly, even if we know that the earth is now heating up, has an ever increasing ozone hole, and from this strange weather effects can be predicted, how much of this is due to homorganic factors, such as CFCs, CO₂ increases, hydrocarbon burning, and the like? Is it really the case, as Science magazine claimed in 1990, "24% of greenhouse encouraging gases are of homorganic origin"?

In this passage the author is primarily interested in

- A. Whether scientific truths are simply a matter of consensus
- B. Determining how well established the greenhouse effect is and to what degree it is worsened by human actions

- C. Whether the hot spot El Niño is balanced elsewhere by cold spots
- D. Determining if most scientists would be inclined to give a positive answer to the question of whether there is a greenhouse effect and if it is worsened by human actions
- E. Making a simple synchronic whole earth measurement more than a blip in the diachronic history of Ice Age cycles over the last tens of thousands of years.

Correct Answer: B

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The author questions the claim that there is indeed a greenhouse effect that is made worse by human actions. A. is too general an answer, while D. is too specific. D. is wrong because it is probing whether scientists agree, not whether there the phenomenon actually exists.

QUESTION 17

Take a very commonplace, often discussed and critical topic: Are we detecting a greenhouse effect, and related to this, is it exacerbated by "homogenic factors," i.e., human actions? Most would be inclined to give a positive answer to both of these questions. But, if pushed, what would be the evidence, and how well grounded would it be for such affirmations?

Within scientific communities and associated scientifically informed circles, the answers have to be somewhat more ambiguous, particularly when rigorous questions concerning evidence are raised. Were scientific truth to be a matter of consensus, and some argue that scientific truth often turns out to be just that, then it is clear that there is beginning to be a kind of majority consensus among many earth science practitioners that the temperature of the Earth, particularly of the oceans, is indeed rising and that this is a crucial indicator for a possible greenhouse effect. Most of these scientists admit that the mean oceanic temperature has risen globally in the last several decades. But this generalization depends upon how accurate measurements may be, not just for samples, but also for the whole Earth. A hot spot, for example the now four year old hot spot near New Guinea which is part of the El Niño cycle, does not count by itself because it might be balanced by cold spots elsewhere. And the fact of the matter is that "whole earth measurements" are still rare and primitive in the simple sense that we simply do not have enough thermometers out. Secondly, even if we had enough thermometers, a simply synchronic whole earth measurement over three decades is but a blip in the diachronic history of ice age cycles over the last tens of thousands of years. Thirdly, even if we know that the earth is now heating up, has an ever increasing ozone hole, and from this strange weather effects can be predicted, how much of this is due to homogenic factors, such as CFCs, CO2 increases, hydrocarbon burning, and the like? Is it really the case, as Science magazine claimed in 1990, "24% of greenhouse encouraging gases are of homogenic origin"?

The author of the passage would be most likely to agree with which of the following statements about the greenhouse effect?

- A. 24% of greenhouse encouraging gases are of homogenic origin.
- B. There is a greenhouse effect that is exacerbated by homogenic factors.
- C. The ozone hole is increasing due to homogenic factors, such as CFCs, CO2 increases, hydrocarbon burning, and the like.
- D. One can determine if mean oceanic temperatures have risen globally in the last several decades only if measurements of ocean temperatures are precise.
- E. Hot spots, such as the El Niño cycle, should not be counted as a factor in the greenhouse effect.

Correct Answer: D

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

Scientists are basing their claims on global warming on rising ocean temperatures. One can tell if temperatures have in fact risen only by measuring them correctly.

QUESTION 18

Take a very commonplace, often discussed and critical topic: Are we detecting a greenhouse effect, and related to this, is it exacerbated by "homogenic factors," i.e., human actions? Most would be inclined to give a positive answer to both of these questions. But, if pushed, what would be the evidence, and how well grounded would it be for such affirmations?

Within scientific communities and associated scientifically informed circles, the answers have to be somewhat more ambiguous, particularly when rigorous questions concerning evidence are raised. Were scientific truth to be a matter of consensus, and some argue that scientific truth often turns out to be just that, then it is clear that there is beginning to be a kind of majority consensus among many earth science practitioners that the temperature of the Earth, particularly of the oceans, is indeed rising and that this is a crucial indicator for a possible greenhouse effect. Most of these scientists admit that the mean oceanic temperature has risen globally in the last several decades. But this generalization depends upon how accurate measurements may be, not just for samples, but also for the whole Earth. Hot spots, for example the now four year old hot spot near New Guinea which is part of the El Niño cycle, does not count by itself because it might be balanced by cold spots elsewhere. And the fact of the matter is that "whole earth measurements" are still rare and primitive in the simple sense that we simply do not have enough thermometers out. Secondly, even if we had enough thermometers, a simply synchronic whole earth measurement over three decades is but a blip in the diachronic history of ice age cycles over the last tens of thousands of years. Thirdly, even if we know that the earth is now heating up, has an ever increasing ozone hole, and from this strange weather effects can be predicted, how much of this is due to homogenic factors, such as CFCs, CO₂ increases, hydrocarbon burning, and the like? Is it really the case, as Science magazine claimed in 1990, "24% of greenhouse encouraging gases are of homogenic origin"?

It can be inferred from the passage that

- A. We cannot be certain that strange weather effects are a result of the earth heating up and an ever- increasing ozone hole.
- B. The greenhouse effect is the most widely discussed topic in the scientifically informed circles.
- C. If the temperature of the oceans has ceased to rise at an ever-increasing rate, then the rate of global warming has increased.
- D. Strange weather effects have been shown to be due to the diachronic effects of hydrocarbon burning and not to increases in CFC.
- E. Strange weather effects are caused by the increase use of CFCs, CO₂, and similar gasses.

Correct Answer: A

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The author is questioning the cause and effect relationship between the increasingly large ozone hole and global warming, as well as cause and effect

relationship between global warming and strange weather effects

QUESTION 19

Take a very commonplace, often discussed and critical topic: Are we detecting a greenhouse effect, and related to this, is it exacerbated by "homogenic factors," i.e., human actions? Most would be inclined to give a positive answer to both of these questions. But, if pushed, what would be the evidence, and how well grounded would it be for such affirmations?

Within scientific communities and associated scientifically informed circles, the answers have to be somewhat more ambiguous, particularly when rigorous questions concerning evidence are raised. Were scientific truth to be a matter of consensus, and some argue that scientific truth often turns out to be just that, then it is clear that there is beginning to be a kind of majority consensus among many earth science practitioners that the temperature of the Earth, particularly of the oceans, is indeed rising and that this is a crucial indicator for a possible greenhouse effect. Most of these scientists admit that the mean oceanic temperature has risen globally in the last several decades. But this generalization depends upon how accurate measurements may be, not just for samples, but also for the whole Earth. Hot spots, for example the now four year old hot spot near New Guinea which is part of the El Niño cycle, does not count by itself because it might be balanced by cold spots elsewhere. And the fact of the matter is that "whole earth measurements" are still rare and primitive in the simple sense that we simply do not have enough thermometers out. Secondly, even if we had enough thermometers, a simply synchronic whole earth measurement over three decades is but a blip in the diachronic history of ice age cycles over the last tens of thousands of years. Thirdly, even if we know that the earth is now heating up, has an ever increasing ozone hole, and from this strange weather effects can be predicted, how much of this is due to homogenic factors, such as CFCs, CO₂ increases, hydrocarbon burning, and the like? Is it really the case, as Science magazine claimed in 1990, "24% of greenhouse encouraging gases are of homogenic origin"?

The author's claim that, a simply synchronic whole earth measurement over three decades is but a blip in the diachronic history of ice age cycles over the last tens of thousands of years would be strengthened if the author

- A. Indicated the minimum number of thermometers necessary for a whole earth measurement.
- B. Described the factors that precipitated the start of a new ice age.
- C. Compare synchronic whole earth measurements with diachronic whole earth measurements.
- D. Proved that the mean number of years required to detect significant changes in weather patterns is greater than thirty.
- E. Specified the exact location and quantity of thermometers placed by scientists around the globe.

Correct Answer: D

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

If one knows that change can be detected only after much more than thirty years, then measurements taken over a thirty-year period is insignificant

QUESTION 20

An Australian group named Action Council on Smoking and Health (ACSH) has recently lobbied to make warnings on cigarette packets more graphic. The council proposed that striking visual photos of diseased organs should be put on at least 50% of outside packaging, in conjunction with health warnings outlining smoking hazards enumerated in a separate leaflet placed inside the cigarette packet. The ACSH claim that bland and ineffectual warnings like "Smoking is a health hazard" currently found on cigarette packets are not nearly sufficient.

Substituting those inadequate admonitions with explicit photos will provide a powerful visual stimulus to help smokers relinquish their habit. The current cautions on cigarette packets have little or no impact on smokers who have grown immune to the warnings that focus on abstract tobacco related risks and illnesses from which smokers can easily disassociate themselves. The proposed new tactics would concentrate on the perspective of the individual smoker through a demonstration of what is occurring in his body each time he reaches for a cigarette, rather than a generic cautionary word of advise. The ACSH cited the results of recent studies conducted by psychologists at McKean University confirming that evidence related to one's own experience is more effective at influencing future behavior than a presentation of facts and figures. An further rationale for the addition of pictures to cigarette packages is the finding that smokers handle their packets 20-30 times a day, on average, thus, if graphic pictures on cigarette packets were introduced, smoker would have 20-30 chances to face the harsh reality of what damage they are doing to themselves each time they light up. Even more essential than the pictures on the outside label, ACSH strongly advocate including warnings and helpful information in a leaflet inserted into the packet of cigarettes. Even an analgesic, ACSH adds, found in every bathroom cabinet has all possible side effects enumerated in the insert. How much more imperative is it then when the substance in question is tobacco, a dried weed that contains highly noxious nicotine that society still accepts even though it kills one of every two of its users. Fundamentally, what is at stake here is consumer rights. Smokers should know what substances they are inhaling, and what damage they are inflicting to their bodies, though surprisingly, even today, many do not. For this reason alone, the recommendation for more graphic pictures and warnings on cigarette packets, which many seem excessive, is being seriously considered.

It can be inferred from the passage

- A. That cigarette manufacturers would comply with regulations ordering them to add graphic pictures of diseased organs to their outside packaging.
- B. That society will not continue to condone smoking if it is proven even more dangerous than was previously assumed.
- C. That smoking cigarettes cause damage to the internal organs of the body.
- D. That if the written warnings were less bland and ineffectual, smokers would not take more notice of them.
- E. That smokers look at their cigarette packages each time they take out a cigarette.

Correct Answer: C

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

We do not have information about A. B. and D. from the passage. E. is incorrect because the passage claims that smokers have an opportunity to look at their cigarette packages, not that they actually do.

QUESTION 21

An Australian group named Action Council on Smoking and Health (ACSH) has recently lobbied to make warnings on cigarette packets more graphic. The council proposed that striking visual photos of diseased organs should be put on at least 50% of outside packaging, in conjunction with health warnings outlining smoking hazards enumerated in a separate leaflet placed inside the cigarette packet. The ACSH claim that bland and ineffectual warnings like "Smoking is a health hazard" currently found on cigarette packets are not nearly sufficient.

Substituting those inadequate admonitions with explicit photos will provide a powerful visual stimulus to help smokers relinquish their habit. The current cautions on cigarette packets have little or no impact on smokers who have grown immune to the warnings that focus on abstract tobacco related risks and illnesses from which smokers can easily disassociate themselves. The proposed new tactics would concentrate on the perspective of the individual smoker through a demonstration of what is occurring in his body each time he reaches for a cigarette, rather than a generic cautionary word of advise.

The ACSH cited the results of recent studies conducted by psychologists at McKean University confirming that evidence related to one's own experience is more effective at influencing future behavior than a presentation of facts and figures. An further rationale for the addition of pictures to cigarette packages is the finding that smokers handle their packets 20-30 times a day, on average, thus, if graphic pictures on cigarette packets were introduced, smoker would have 20-30 chances to face the harsh reality of what damage they are doing to themselves each time they light up. Even more essential than the pictures on the outside label, ACSH strongly advocate including warnings and helpful information in a leaflet inserted into the packet of cigarettes. Even an analgesic, ACSH adds, found in every bathroom cabinet has all possible side effects enumerated in the insert. How much more imperative is it then when the substance in question is tobacco, a dried weed that contains highly noxious nicotine that society still accepts even though it kills one of every two of its users. Fundamentally, what is at stake here is consumer rights. Smokers should know what substances they are inhaling, and what damage they are inflicting to their bodies, though surprisingly, even today, many do not. For this reason alone, the recommendation for more graphic pictures and warnings on cigarette packets, which many seem excessive, is being seriously considered.

The author cites studies conducted at McKean University to account for why

- A. A presentation of facts and figures is more effective at influencing future behavior than evidence related to one's own experience.
- B. A presentation of facts and figures is less effective at influencing future behavior than evidence related to one's own experience.
- C. Evidence related to one's own experience has a more long-lasting effect than future behavior.
- D. The ACSH claim that graphic visual pictures of diseased organs would not be more effective than stating facts about the consequences to the body of long-term smoking.
- E. The ACSH claim that graphic visual pictures of diseased organs would not be less effective than stating facts about the consequences to the body of long-term smoking.

Correct Answer: E

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The author mentions the study as evidence presented by the ACSH to back their claim that visual pictures would be more effective than the present warning found on cigarette boxes.

QUESTION 22

An Australian group named Action Council on Smoking and Health (ACSH) has recently lobbied to make warnings on cigarette packets more graphic. The council proposed that striking visual photos of diseased organs should be put on at least 50% of outside packaging, in conjunction with health warnings outlining smoking hazards enumerated in a separate leaflet placed inside the cigarette packet. The ACSH claim that bland and ineffectual warnings like "Smoking is a health hazard" currently found on cigarette packets are not nearly sufficient.

Substituting those inadequate admonitions with explicit photos will provide a powerful visual stimulus to help smokers relinquish their habit. The current cautions on cigarette packets have little or no impact on smokers who have grown immune to the warnings that focus on abstract tobacco related risks and illnesses from which smokers can easily disassociate themselves. The proposed new tactics would concentrate on the perspective of the individual smoker through a demonstration of what is occurring in his body each time he reaches for a cigarette, rather than a generic cautionary word of advise. The ACSH cited the results of recent studies conducted by psychologists at McKean University confirming that evidence related to one's own experience is more effective at influencing future behavior than a presentation of facts and figures. An further rationale for the addition of pictures to cigarette

packages is the finding that smokers handle their packets 20-30 times a day, on average, thus, if graphic pictures on cigarette packets were introduced, smoker would have 20-30 chances to face the harsh reality of what damage they are doing to themselves each time they light up. Even more essential than the pictures on the outside label, ACSH strongly advocate including warnings and helpful information in a leaflet inserted into the packet of cigarettes. Even an analgesic, ACSH adds, found in every bathroom cabinet has all possible side effects enumerated in the insert. How much more imperative is it then when the substance in question is tobacco, a dried weed that contains highly noxious nicotine that society still accepts even though it kills one of every two of its users. Fundamentally, what is at stake here is consumer rights. Smokers should know what substances they are inhaling, and what damage they are inflicting to their bodies, though surprisingly, even today, many do not. For this reason alone, the recommendation for more graphic pictures and warnings on cigarette packets, which many seem excessive, is being seriously considered.

Which of the following, if true, would be most useful in supporting the claims made by the ACSH?

- A. There is firm evidence that information communicated in a textual format is more convincing than the same information conveyed in the form of visual depictions.
- B. There is firm evidence that information conveyed in the form of visual depictions is more convincing than the same information communicated in a textual format.
- C. A study of over 3000 individuals shows a statistically significant relationship between levels of nicotine in cigarettes and pulmonary damage.
- D. A study of over 3000 individuals shows a statistically significant relationship between smoking and pulmonary damage.
- E. A survey reveals that 79% of smokers look at their cigarette packages when taking out a cigarette.

Correct Answer: B

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. If smokers were more convinced of the dangers of smoker by pictures than by text, they would be more likely to be influenced by the pictures that the ACSH is proposing.

QUESTION 23

An Australian group named Action Council on Smoking and Health (ACSH) has recently lobbied to make warnings on cigarette packets more graphic. The council proposed that striking visual photos of diseased organs should be put on at least 50% of outside packaging, in conjunction with health warnings outlining smoking hazards enumerated in a separate leaflet placed inside the cigarette packet. The ACSH claim that bland and ineffectual warnings like "Smoking is a health hazard" currently found on cigarette packets are not nearly sufficient.

Substituting those inadequate admonitions with explicit photos will provide a powerful visual stimulus to help smokers relinquish their habit. The current cautions on cigarette packets have little or no impact on smokers who have grown immune to the warnings that focus on abstract tobacco related risks and illnesses from which smokers can easily disassociate themselves. The proposed new tactics would concentrate on the perspective of the individual smoker through a demonstration of what is occurring in his body each time he reaches for a cigarette, rather than a generic cautionary word of advise. The ACSH cited the results of recent studies conducted by psychologists at McKean University confirming that evidence related to one's own experience is more effective at influencing future behavior than a presentation of facts and figures. An further rationale for the addition of pictures to cigarette packages is the finding that smokers handle their packets 20-30 times a day, on average, thus, if graphic pictures on cigarette packets were introduced, smoker would have 20-30 chances to face the harsh reality of what damage they are doing to themselves each time they light up. Even more essential

than the pictures on the outside label, ACSH strongly advocate including warnings and helpful information in a leaflet inserted into the packet of cigarettes. Even an analgesic, ACSH adds, found in every bathroom cabinet has all possible side effects enumerated in the insert. How much more imperative is it then when the substance in question is tobacco, a dried weed that contains highly noxious nicotine that society still accepts even though it kills one of every two of its users. Fundamentally, what is at stake here is consumer rights. Smokers should know what substances they are inhaling, and what damage they are inflicting to their bodies, though surprisingly, even today, many do not. For this reason alone, the recommendation for more graphic pictures and warnings on cigarette packets, which many seem excessive, is being seriously considered.

The passage does NOT state which of the following about smoking warnings.

- A. Current graphic warnings are effective.
- B. The addition of graphic warnings would be an impetus to smokers to relinquish their habit.
- C. Current written warnings are not adequate.
- D. Current written warnings are not effective.
- E. Current written warnings are not as exhaustive as those that accompany common analgesics.

Correct Answer: A

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is A. The passage does not say that current graphic warnings are effective since there are currently no graphic warnings, only written ones.

QUESTION 24

Gene therapy offers a new treatment paradigm for curing human disease. Rather than altering the disease phenotype by using agents that interact with gene products, or are themselves gene products, gene therapy can theoretically modify specific genes resulting in disease cure following a single administration. Initially gene therapy was envisioned for the treatment of genetic disorders, but is currently being studied for use with a wide range of diseases, including cancer, peripheral vascular disease, arthritis, Neurodegenerative disorders and other acquired diseases. Certain key elements are required for a successful gene therapy strategy. The most elementary of these is that the relevant gene be identified and cloned. Upon completion of the Human Genome Project, gene availability will be unlimited. Once identified and cloned, the next consideration must be expression of the gene. Questions pertaining to the efficiency of gene transfer and gene expression remain at the forefront of gene therapy research, with current debates revolving around the transfer of desired genes to appropriate cells, and then to obtaining sufficient levels of expression for disease treatment. With luck, future research on gene transfer and tissue-specific gene expression will resolve these issues for the majority of gene therapy protocols. Other important considerations for a gene therapy strategy include a sufficient understanding of the pathogenesis of the targeted disorder, potential side effects of the gene therapy treatment, and a more in depth understanding of the target cells which are to receive gene therapy. Gene transfer vector is the mechanism by which the gene is transferred into a cell. Currently there are at least 150 clinical gene therapy protocols worldwide. Since the approval process for these protocols is not as public outside the U.S., it is difficult to ascertain the exact number of worldwide protocols. As of December 1995, 1024 patients had been treated with either a gene transfer or gene therapy protocol. Much controversy exists regarding how many of these patients have benefited from their gene therapy, and no one has yet been cured.

Public controversy in the field of human gene therapy is driven by several factors. Ordinary citizens as well as scientists easily understand the enormous potential of gene therapy, but the former may not appreciate all the pitfalls and uncertainty that lie in the immediate future. The financial interests of

biotechnology firms and, some have asserted the career interests of some gene therapists have encouraged extravagant, or at least verily optimistic public statements about contemporary gene therapy. In spite of the proliferation of protocols, the actual number of patients treated remains small, and only one genuinely controlled study of human gene therapy has been published as of this date.

In the passage, the author anticipates which of the following as a possible obstacle to the introduction of gene therapy to mainstream medicine?

- A. Overly optimistic public statements given by scientists who have a vested interest
- B. The general public's difficulty in grasping gene therapy's vast potential.
- C. Unchecked financial interests of biotechnology firms.
- D. The relatively small number of controlled studies of human gene therapy published as of this date.
- E. Hazards of which the general public is currently unaware.

Correct Answer: E

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is E. The passage states that both ordinary citizens and scientists understand potential of gene therapy, but the former, i.e. the general public may not appreciate all the pitfalls and uncertainty that lie in the immediate future.

QUESTION 25

Gene therapy offers a new treatment paradigm for curing human disease. Rather than altering the disease phenotype by using agents that interact with gene products, or are themselves gene products, gene therapy can theoretically modify specific genes resulting in disease cure following a single administration. Initially gene therapy was envisioned for the treatment of genetic disorders, but is currently being studied for use with a wide range of diseases, including cancer, peripheral vascular disease, arthritis, Neurodegenerative disorders and other acquired diseases. Certain key elements are required for a successful gene therapy strategy. The most elementary of these is that the relevant gene be identified and cloned. Upon completion of the Human Genome Project, gene availability will be unlimited. Once identified and cloned, the next consideration must be expression of the gene.

Questions pertaining to the efficiency of gene transfer and gene expression remain at the forefront of gene therapy research, with current debates revolving around the transfer of desired genes to appropriate cells, and then to obtaining sufficient levels of expression for disease treatment. With luck, future research on gene transfer and tissue-specific gene expression will resolve these issues for the majority of gene therapy protocols. Other important considerations for a gene therapy strategy include a sufficient understanding of the pathogenesis of the targeted disorder, potential side effects of the gene therapy treatment, and a more in depth understanding of the target cells which are to receive gene therapy. Gene transfer vector is the mechanism by which the gene is transferred into a cell. Currently there are at least 150 clinical gene therapy protocols worldwide. Since the approval process for these protocols is not as public outside the U.S., it is difficult to ascertain the exact number of worldwide protocols. As of December 1995, 1024 patients had been treated with either a gene transfer or gene therapy protocol. Much controversy exists regarding how many of these patients have benefited from their gene therapy, and no one has yet been cured.

Public controversy in the field of human gene therapy is driven by several factors. Ordinary citizens as well as scientists easily understand the enormous potential of gene therapy, but the former may not appreciate all the pitfalls and uncertainty that lie in the immediate future. The financial interests of biotechnology firms and, some have asserted the career interests of some gene therapists have encouraged extravagant, or at least verily optimistic public statements about contemporary gene therapy. In spite of the proliferation of protocols, the actual number of patients treated remains small, and

only one genuinely controlled study of human gene therapy has been published as of this date

All of the following are mentioned in the passage as elements that are required for a successful gene therapy strategy EXCEPT:

- A. Identifying the relevant gene
- B. Expressing the relevant gene
- C. Determining the side effects of the relevant gene
- D. Understanding of the pathogenesis of the targeted disorder
- E. Gaining and a more in depth understanding of the target cells which are to receive gene therapy.

Correct Answer: C

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is C. One must determine the side effects of the relevant gene therapy treatment, and not of the relevant gene itself

QUESTION 26

Gene therapy offers a new treatment paradigm for curing human disease. Rather than altering the disease phenotype by using agents that interact with gene products, or are themselves gene products, gene therapy can theoretically modify specific genes resulting in disease cure following a single administration. Initially gene therapy was envisioned for the treatment of genetic disorders, but is currently being studied for use with a wide range of diseases, including cancer, peripheral vascular disease, arthritis, Neurodegenerative disorders and other acquired diseases. Certain key elements are required for a successful gene therapy strategy. The most elementary of these is that the relevant gene be identified and cloned. Upon completion of the Human Genome Project, gene availability will be unlimited. Once identified and cloned, the next consideration must be expression of the gene. Questions pertaining to the efficiency of gene transfer and gene expression remain at the forefront of gene therapy research, with current debates revolving around the transfer of desired genes to appropriate cells, and then to obtaining sufficient levels of expression for disease treatment. With luck, future research on gene transfer and tissue-specific gene expression will resolve these issues for the majority of gene therapy protocols. Other important considerations for a gene therapy strategy include a sufficient understanding of the pathogenesis of the targeted disorder, potential side effects of the gene therapy treatment, and a more in depth understanding of the target cells which are to receive gene therapy. Gene transfer vector is the mechanism by which the gene is transferred into a cell. Currently there are at least 150 clinical gene therapy protocols worldwide. Since the approval process for these protocols is not as public outside the U.S., it is difficult to ascertain the exact number of worldwide protocols. As of December 1995, 1024 patients had been treated with either a gene transfer or gene therapy protocol. Much controversy exists regarding how many of these patients have benefited from their gene therapy, and no one has yet been cured.

Public controversy in the field of human gene therapy is driven by several factors. Ordinary citizens as well as scientists easily understand the enormous potential of gene therapy, but the former may not appreciate all the pitfalls and uncertainty that lie in the immediate future. The financial interests of biotechnology firms and, some have asserted the career interests of some gene therapists have encouraged extravagant, or at least verily optimistic public statements about contemporary gene therapy. In spite of the proliferation of protocols, the actual number of patients treated remains small, and only one genuinely controlled study of human gene therapy has been published as of this date

The author's attitude toward the gene therapy as a future cure for cancer, peripheral vascular disease, arthritis, Neurodegenerative disorders and other

acquired diseases is

- A. Indifference
- B. Disapproval
- C. Amusement
- D. Cautious optimism
- E. Censure

Correct Answer: D

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. In the opening sentence, the author optimistically states that gene therapy offers a new treatment paradigm for curing human disease. However, in the fifth paragraph the author mentions some of the problems.

QUESTION 27

Gene therapy offers a new treatment paradigm for curing human disease. Rather than altering the disease phenotype by using agents that interact with gene products, or are themselves gene products, gene therapy can theoretically modify specific genes resulting in disease cure following a single administration. Initially gene therapy was envisioned for the treatment of genetic disorders, but is currently being studied for use with a wide range of diseases, including cancer, peripheral vascular disease, arthritis, Neurodegenerative disorders and other acquired diseases. Certain key elements are required for a successful gene therapy strategy. The most elementary of these is that the relevant gene be identified and cloned. Upon completion of the Human Genome Project, gene availability will be unlimited. Once identified and cloned, the next consideration must be expression of the gene. Questions pertaining to the efficiency of gene transfer and gene expression remain at the forefront of gene therapy research, with current debates revolving around the transfer of desired genes to appropriate cells, and then to obtaining sufficient levels of expression for disease treatment. With luck, future research on gene transfer and tissue-specific gene expression will resolve these issues for the majority of gene therapy protocols. Other important considerations for a gene therapy strategy include a sufficient understanding of the pathogenesis of the targeted disorder, potential side effects of the gene therapy treatment, and a more in depth understanding of the target cells which are to receive gene therapy. Gene transfer vector is the mechanism by which the gene is transferred into a cell. Currently there are at least 150 clinical gene therapy protocols worldwide. Since the approval process for these protocols is not as public outside the U.S., it is difficult to ascertain the exact number of worldwide protocols. As of December 1995, 1024 patients had been treated with either a gene transfer or gene therapy protocol. Much controversy exists regarding how many of these patients have benefited from their gene therapy, and no one has yet been cured.

Public controversy in the field of human gene therapy is driven by several factors. Ordinary citizens as well as scientists easily understand the enormous potential of gene therapy, but the former may not appreciate all the pitfalls and uncertainty that lie in the immediate future. The financial interests of biotechnology firms and, some have asserted the career interests of some gene therapists have encouraged extravagant, or at least verily optimistic public statements about contemporary gene therapy. In spite of the proliferation of protocols, the actual number of patients treated remains small, and only one genuinely controlled study of human gene therapy has been published as of this date. The primary function of the fifth paragraph is to

- A. Explain effects
- B. Recommend actions

- C. Identify problems
- D. Evaluate solutions
- E. Warn of consequences

Correct Answer: C

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is C. The fifth paragraph is devoted to identifying various problems in the field today, such as the exaggerated claims made by biotechnological firms with vested financial interests.

QUESTION 28

Unlike the United States with its generalissimo politicians - Washington, Jackson, Grant, and Eisenhower- the 'martial arts' have been conspicuously absent from Canadian politics. The exception to the rule is former Prime Minister Pierre Elliot Trudeau, who became the first Canadian leader to bring a gunslinger ethos to Canadian politics. Trudeau introduced Canada to the refined art of single combat; it was the politics of "doing it my way". Single-combat confrontation implied much more than the renegade in power did, and far less than the tricks of William Lyon Mackenzie King, prime minister intermittently between 1921 and 1948.

Trudeau's unique background prepared him for the role of authoritarian leader he would assume later in life. Born on October 18, 1919, Trudeau lived in French-speaking Montreal, but heard English at home from his mother, making it easy for the young politician to appeal to all sectors of Canada, a bilingual country. As a young man, he walked and cycled through Europe, finding himself on occasion on the wrong side of the bars in foreign jails. By 1940, Trudeau entered the law faculty at the University of Montreal. As a student he enlisted in the Canadian Officers Training Corps, where he was given a commission as a lieutenant, a rank he held until his retirement in 1947. Trudeau, a renowned sportsman, held a brown belt in karate, knew how to skin dive and could descend 150 feet off a cliff with ease. He continued performing flamboyant physical feats even in later life as Canada's fifteenth prime minister, astounding Canadians with his prowess. The public's adoration made it possible for him to practice his personal brand of 'do it my way' politics, initiating profound and long-lasting changes to his country.

Other leaders would never have undertaken to deal with such taboo issues as divorce, abortion and homosexuality matters likely to infuriate conservative Canada from coast to coast. Even the powerful Mackenzie King dared not touch any of the three, though Trudeau tackled them together in an omnibus bill as Minister of Justice under Lester B. Pearson. His reason for loosening legislation on these issues was, as he put poetically put it, "The state has no business in the bedrooms of the nation." The myths- makers have it that this was Trudeau's first deliberate 'gun slinging' move, performed with the ultimate goal of attaining national leadership. Contrary to popular belief, Trudeau had no leadership aspirations at the time; all he had was a passion for combat that eclipsed other religious considerations. Trudeau instigated far-reaching changes in legislation governing divorce, abortion and homosexuality that have had a major impact on Canada, shaping the country into what it is today.

It can be inferred from the passage that former Prime Minister William Lyon Mackenzie King.

- A. Was opposed to abortion and put forward legislation making it illegal
- B. Was opposed to abortion but did not put forward legislation making it illegal
- C. Was in favor of abortion and put forward legislation making it legal
- D. Was in favor of abortion but did not put forward legislation making it legal

E. Did not put forward legislation making abortion legal

Correct Answer: E

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is E. The passage states that Mackenzie King dared not touch the issue of abortion, so it can be inferred from the passage that he did not put forward any abortion legislation. The passage provides no information on what Mackenzie King's opinions were on the subject.

QUESTION 29

Unlike the United States with its generalissimo politicians - Washington, Jackson, Grant, and Eisenhower- the 'martial arts' have been conspicuously absent from Canadian politics. The exception to the rule is former Prime Minister Pierre Elliot Trudeau, who became the first Canadian leader to bring a gunslinger ethos to Canadian politics. Trudeau introduced Canada to the refined art of single combat; it was the politics of "doing it my way". Single-combat confrontation implied much more than the renegade in power did, and far less than the tricks of William Lyon Mackenzie King, prime minister intermittently between 1921 and 1948.

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The author of the passage mentions Trudeau's accomplishments in sports primarily in order to

- A. Explain the source of Trudeau's physical stamina
- B. Illustrate that he had earned the adoration of the Canadian public
- C. Contrast it to his personal brand of 'do it my way' politics
- D. Provide one reason why he was able to single-handedly push through legislation that should normally have shocked conservative Canada
- E. Provide one reason why he was able to single-handedly thwart legislation that should normally have shocked conservative Canada

Correct Answer: D

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. One of the ways Trudeau won the hearts and minds of the Canadian public was by astounding them with his physical prowess. Because the public was so awed by Trudeau as an individual, he was able to pass legislation considered progressive.

QUESTION 30

Unlike the United States with its generalissimo politicians - Washington, Jackson, Grant, and Eisenhower- the 'martial arts' have been conspicuously absent from Canadian politics. The exception to the rule is former Prime Minister Pierre Elliot Trudeau, who became the first Canadian leader to bring a gunslinger ethos to Canadian politics. Trudeau introduced Canada to the refined art of single combat; it was the politics of "doing it my way". Single-combat confrontation implied much more than the renegade in power did, and far less than the tricks of William Lyon Mackenzie King, prime minister intermittently between 1921 and 1948.

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The quotation "The state has no business in the bedrooms of the nation," is most probably used to

- A. Present the opinion that the state should have less of a say in issues that are essentially not public matters
- B. Present the opinion that the state should have less of a say in issues that are essentially public matters
- C. Present the opinion that the state should have more of a say in issues that are essentially not personal matters
- D. Provide an example of Pierre Elliot Trudeau's flamboyant style that he used to captivate the Canadian public
- E. Contrast Pierre Elliot Trudeau's flamboyant style with that of Lester B. Pearson

Correct Answer: A

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is A. Matters that concern "the bedrooms of the nation" are private matters. Trudeau sought to reduce government control in such matters. Answers B. and C. say the opposite, namely that government control in public matter

QUESTION 31

Art is visible. However, everything one sees is filtered through certain conditions, some of them historical, and others, natural. The historical conditions include the material, which is used -- oil, colors, and the canvas; second, a certain style, i.e., a system of rules by which things visible are submitted a priori. There can be a general style, for example, the style of Impressionism, or a particular style, for example, the individual ways in which two painters, both impressionists, paint. The natural conditions include certain unchanging psychological laws of sight, for instance, the effects of colors or optical illusions.

The conditions of art are nothing but a particular way of interpreting reality. To understand this, one can examine the difference between the classical Greek and the classical Egyptian styles. For the Greeks, the reality of the visible was given by the perspective and the situation in which the object appears; for that reason they presented a person in his individual movements. For the Egyptians, however, this was only the appearance of a transitory moment, which, according to their beliefs, was not real. Therefore, the Egyptians searched for the permanent essence and the typical character in their depiction of an object. For the Egyptians, Greek art was an illusion; for the Greeks, on the other hand, Egyptian art was unrealistic constructivism. The way in which reality appears in art must not be regarded on its own. It is affected by many other systems of recognizing reality, including the political, religious, economic, intellectual, and social -- in short, all the phenomena of human life. Moreover, art is always of a certain epoch, with its particular conception of reality. Thus, when discussing, for example, the art of ancient myth, of medieval Christianity, or that of the technological age, one must be aware that myth, Christianity, or technology was the most salient feature of the epoch.

It is paradoxical to understand art as some kind of copy of the fields of experience connected with it. So, for example, it is meaningless for the work of art as such if one compares the landscape of a painting with the landscape, which served the artist as his model. Even if the artist had tried to make what he painted as similar as possible to the model he used, the landscape which he saw is only the matter from which something completely different emerges since he has submitted its view to the a priori conditions of art: namely to the material used (colors, canvas, etc.), to his style, and even to the fact that he paints on a flat surface. Thus one must contemplate a work of art by itself. Even if it is connected to other fields of experience it nevertheless displays something unique which appears in that piece of art and there alone.

According to the passage, classical Egyptians did not present a person in his individual movements

- A. Because the Greeks believed that the reality of the visible was given by the perspective and the situation in which the object appears
- B. Because the Greeks did not believe that the reality of the visible was given by the perspective and the situation in which the object appears
- C. Because the Egyptians believed that the reality of the visible was given by the perspective and the situation in which the object appears
- D. Because the Egyptians did not believe that the reality of the visible was given by the perspective and the situation in which the object appears
- E. Because for the Egyptians, Greek art was an illusion.

Correct Answer: D

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. The Egyptians believed that the reality of the visible was not given by the perspective and the situation in which the object appears. They thought that this was the appearance of a transitory moment, which was not real.

QUESTION 32

Art is visible. However, everything one sees is filtered through certain conditions, some of them historical, and others, natural. The historical conditions include the material, which is used -- oil, colors, and the canvas; second, a certain style, i.e., a system of rules by which things visible are submitted a priori. There can be a general style, for example, the style of Impressionism, or a particular style, for example, the individual ways in which two painters, both impressionists, paint. The natural conditions include certain unchanging psychological laws of sight, for instance, the effects of colors or optical illusions.

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The author mentions which of the following as one of the conditions through which art is seen?

- A. Impressionism
- B. Optical illusions
- C. Nature
- D. Perspective
- E. Illusions

Correct Answer: B

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. The author states in the first paragraph that art is seen through natural conditions including optical illusions.

QUESTION 33

Art is visible. However, everything one sees is filtered through certain conditions, some of them historical, and others, natural. The historical conditions include the material, which is used -- oil, colors, and the canvas; second, a certain style, i.e., a system of rules by which things visible are submitted a priori. There can be a general style, for example, the style of Impressionism, or a particular style, for example, the individual ways in which two painters, both impressionists, paint. The natural conditions include certain unchanging psychological laws of sight, for instance, the effects of colors or optical illusions.

The conditions of art are nothing but a particular way of interpreting reality. To understand this, one can examine the difference between the classical Greek and the classical Egyptian styles. For the Greeks, the reality of the visible was given by the perspective and the situation in which the object appears; for that reason they presented a person in his individual movements. For the Egyptians, however, this was only the appearance of a transitory moment, which, according to their beliefs, was not real. Therefore, the Egyptians searched for the permanent essence and the typical character in their depiction of an object. For the Egyptians, Greek art was an illusion; for the Greeks, on the other hand, Egyptian art was unrealistic constructivism. The way in which reality appears in art must not be regarded on its own. It is affected by many other systems of recognizing reality, including the political, religious, economic, intellectual, and social -- in short, all the phenomena of human life. Moreover, art is always of a certain epoch, with its particular conception of reality. Thus, when discussing, for example, the art of ancient myth, of medieval Christianity, or that of the technological age, one must be aware that myth, Christianity, or technology was the most salient feature of the epoch.

It is paradoxical to understand art as some kind of copy of the fields of experience connected with it. So, for example, it is meaningless for the work of art as such if one compares the landscape of a painting with the landscape, which served the artist as his model. Even if the artist had tried to make what he painted as similar as possible to the model he used, the landscape which he saw is only the matter from which something completely different emerges since he has submitted its view to the a priori conditions of art: namely to the material used (colors, canvas, etc.), to his style, and even to the fact that he paints on a flat surface. Thus one must contemplate a work of art by itself. Even if it is connected to other fields of experience it nevertheless displays something unique which appears in that piece of art and there alone.

By asserting that art is filtered through certain conditions (line???), the author suggests which of the following?

- A. Even if the artist tried to make what he painted as similar as possible to the model he used, he would not succeed
- B. Even if the artist tried to make what he painted as similar as possible to the model he used, it would be impossible to critique it
- C. Even if the artist tried to make what he painted as similar as possible to the model he used, the landscape would be affected by many other systems of recognizing reality
- D. The way in which reality appears in art influences other systems of recognizing reality, including the political, religious, economic, intellectual, and social
- E. The way in which reality appears in art is influenced by other systems of recognizing reality, including the political, religious, economic, intellectual, and social

Correct Answer: E

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is E. The author states in paragraph three that the way in which reality appears in art is affected by many other systems of recognizing reality including the political, religious, economic, intellectual, and social -- in short, all the phenomena of human life.

QUESTION 34

Art is visible. However, everything one sees is filtered through certain conditions, some of them historical, and others, natural. The historical conditions include the material, which is used -- oil, colors, and the canvas; second, a certain style, i.e., a system of rules by which things visible are submitted a priori. There can be a general style, for example, the style of Impressionism, or a particular style, for example, the individual ways in which two painters, both impressionists, paint. The natural conditions include certain unchanging psychological laws of sight, for instance, the effects of colors or optical illusions.

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The author cites the example of psychological laws of sight, for instance, the effects of colors or optical illusions in order to illustrate

- A. Laws of nature, which are not affected by history
- B. Laws of nature, which are affected by history
- C. Laws of nature, which change history
- D. Laws of history, which are affected by nature
- E. Laws of history, which are not affected by nature

Correct Answer: A

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is A. The author details two kinds of conditions, historical and natural. The natural conditions are said to be unchanging, therefore not affected by history.

QUESTION 35

For a generation of suppressed, restless, working-class youths living in 1960 Jamaica, ska was a medium through which they could find expression.

Since its original appearance, ska has resurfaced twice, each time presenting itself in a different guise to a new generation of music aficionados.

Overcoming its humble beginnings, it has become one of the twentieth century's most enduring and influential styles of music.

Since the early 1940's, Jamaica had adopted and adapted many forms of American musical styles. The predominantly black inhabitants of Jamaica took a liking to rhythm and blues music, importing a considerable number of American records that were showcased at dance halls in the early 1960s.

Jamaican musicians took up the elements of rhythm and blues and combined it with traditional Jamaican mento music. The result was the first wave of ska. Musically, ska is a shuffle rhythm similar to mento but with even closer ties to rhythm and blues, placing the accent on the second and fourth beats, often moving in a 12-bar blues frame. The after beat, played on the piano or strummed by a rhythm guitar, came to be characteristic of the form. A horn section, usually consisting of trumpets, trombones, and saxophones, was a vital element. Classic bands, such as the Wailers wrote songs written about Trench Town (a ghetto), rude boys (street thugs), romance, and even religious themes. In 1965, ska began to take a backseat to a newly evolved type of music, called rock steady, which was more dependent than ska had been on rhythm provided by the bass guitar and drums.

Ska was later exported by traveling Jamaican artists to Great Britain, where it became known as "blue beat." By the mid 1970's, early British punk bands were infusing reggae, a style of music that came from rock steady, into their music. Near the end of the decade, however, there was a resurgence of the influence of ska because of its upbeat, danceable rhythm. This faster paced ska came to be known as two tone. One of the essential messages of two-tone ska was the promotion of racial harmony and of having fun in the face of subjugation.

The third wave of ska began in America around 1990. Bands influenced by the two-tone ska scene began to use punk and metal music to a greater extent. The combination, which is much faster than two tone, sounds very different from the original Jamaican brand of ska. In its three different waves, ska has given voice to seemingly voiceless, downtrodden generations. Each time it resurfaces, a new message is taken up; however, the old messages are never forgotten

The primary purpose of this passage is to

- A. Contrast the musical rhythm of two-tone music with original Jamaican ska from which it developed
- B. Illustrate various ways in which rhythm and blues has influenced ska music
- C. Outline the influences on the various forms of ska music from its inception in Jamaica in early 1960s through its third wave in the 1990s
- D. Describe events leading to the inception, rise and final demise of Jamaican ska music
- E. Trace to evolution of ska music from its inception in Jamaica in early 1960s through its third wave in the 1990s

Correct Answer: E

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is E. The passage follows the development of ska. D. is incorrect because the passage does not deal with the demise, or death, of ska music.

QUESTION 36

For a generation of suppressed, restless, working-class youths living in 1960 Jamaica, ska was a medium through which they could find expression. Since its original appearance, ska has resurfaced twice, each time presenting itself in a different guise to a new generation of music aficionados. Overcoming its humble beginnings, it has become one of the twentieth century's most enduring and influential styles of music. Since the early 1940's, Jamaica had adopted and adapted many forms of American musical styles. The predominantly black inhabitants of Jamaica took a liking to rhythm and blues music, importing a considerable number of American records that were showcased at dance halls in the early 1960s. Jamaican musicians took up the elements of rhythm and blues and combined it with traditional Jamaican mento music. The result was the first wave of ska. Musically, ska is a shuffle rhythm similar to mento but with even closer ties to rhythm and blues, placing the accent on the second and fourth beats, often moving in a 12-bar blues frame. The after beat, played on the piano or strummed by a rhythm guitar, came to be characteristic of the form. A horn section, usually consisting of trumpets, trombones, and saxophones, was a vital element. Classic bands, such as the Wailers wrote songs written about Trench Town (a ghetto), rude boys (street thugs), romance, and even religious themes. In 1965, ska began to take a backseat to a newly evolved type of music, called rock steady, which was more dependent than ska had been on rhythm provided by the bass guitar and drums.

Ska was later exported by traveling Jamaican artists to Great Britain, where it became known as "blue beat." By the mid 1970's, early British punk bands were infusing reggae, a style of music that came from rock steady, into their music. Near the end of the decade, however, there was a resurgence of the influence of ska because of its upbeat, danceable rhythm. This faster paced ska came to be known as two tone. One of the essential messages of two-tone ska was the promotion of racial harmony and of having fun in the face of subjugation.

The third wave of ska began in America around 1990. Bands influenced by the two-tone ska scene began to use punk and metal music to a greater extent. The combination, which is much faster than two tone, sounds very different from the original Jamaican brand of ska. In its three different waves, ska has given voice to seemingly voiceless, downtrodden generations. Each time it resurfaces, a new message is taken up; however, the old messages are never forgotten

According to the passage, Ska music has

- A. Been influenced by rhythm and blues, mento and blue beat
- B. Been influenced by rhythm and blues, and has influenced mento and rock steady
- C. Been influenced by rhythm and blues and rock steady and has influenced punk and metal musicians
- D. Influenced rhythm and blues, reggae and metal musicians.
- E. Been influenced by mento music and has influenced punk and metal musicians.

Correct Answer: E

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is E. Ska music has been influenced, among other things, by mento music. In paragraph five, it is mentioned that ska musicians have influenced both punk and metal musicians.

QUESTION 37

For a generation of suppressed, restless, working-class youths living in 1960 Jamaica, ska was a medium through which they could find expression. Since its original appearance, ska has resurfaced twice, each time presenting itself in a different guise to a new generation of music aficionados. Overcoming its humble beginnings, it has become one of the twentieth century's most enduring and influential styles of music. Since the early 1940's, Jamaica had adopted and adapted many forms of American musical styles. The predominantly black inhabitants of Jamaica took a liking to rhythm and blues music, importing a considerable number of American records that were showcased at dance halls in the early 1960s. Jamaican musicians took up the elements of rhythm and blues and combined it with traditional Jamaican mento music. The result was the first wave of ska. Musically, ska is a shuffle rhythm similar to mento but with even closer ties to rhythm and blues, placing the accent on the second and fourth beats, often moving in a 12-bar blues frame. The after beat, played on the piano or strummed by a rhythm guitar, came to be characteristic of the form. A horn section, usually consisting of trumpets, trombones, and saxophones, was a vital element. Classic bands, such as the Wailers wrote songs written about Trench Town (a ghetto), rude boys (street thugs), romance, and even religious themes. In 1965, ska began to take a backseat to a newly evolved type of music, called rock steady, which was more dependent than ska had been on rhythm provided by the bass guitar and drums.

Ska was later exported by traveling Jamaican artists to Great Britain, where it became known as "blue beat." By the mid 1970's, early British punk bands were infusing reggae, a style of music that came from rock steady, into their music. Near the end of the decade, however, there was a resurgence of the influence of ska because of its upbeat, danceable rhythm. This faster paced ska came to be known as two tone. One of the essential messages of two-tone ska was the promotion of racial harmony and of having fun in the face of subjugation.

The third wave of ska began in America around 1990. Bands influenced by the two-tone ska scene began to use punk and metal music to a greater extent. The combination, which is much faster than two tone, sounds very different from the original Jamaican brand of ska. In its three different waves, ska has given voice to seemingly voiceless, downtrodden generations. Each time it resurfaces, a new message is taken up; however, the old messages are never forgotten

Which of the following statements about ska music is supported by information in the passage?

- A. Rock steady is more dependent than ska on the rhythm provided by the bass guitar and drums.
- B. Reggae, which counts ska as one of its primary influences, developed only after it was exported by traveling Jamaican artists to Great Britain
- C. Ska's appeal over the last half century has been limited to voiceless, downtrodden generations.
- D. Two-tone is a faster paced form of ska that developed in the late 1970s
- E. Mento music places the accent on the second and fourth beats, often moving in a 12-bar blues-frame.

Correct Answer: D

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. In paragraph four, it says that this faster paced ska came to be known as two tone

QUESTION 38

For a generation of suppressed, restless, working-class youths living in 1960 Jamaica, ska was a medium through which they could find expression. Since its original appearance, ska has resurfaced twice, each time presenting itself in a different guise to a new generation of music aficionados.

Overcoming its humble beginnings, it has become one of the twentieth century's most enduring and influential styles of music. Since the early 1940's, Jamaica had adopted and adapted many forms of American musical styles. The predominantly black inhabitants of Jamaica took a liking to rhythm and blues music, importing a considerable number of American records that were showcased at dance halls in the early 1960s. Jamaican musicians took up the elements of rhythm and blues and combined it with traditional Jamaican mento music. The result was the first wave of ska. Musically, ska is a shuffle rhythm similar to mento but with even closer ties to rhythm and blues, placing the accent on the second and fourth beats, often moving in a 12-bar blues frame. The after beat, played on the piano or strummed by a rhythm guitar, came to be characteristic of the form. A horn section, usually consisting of trumpets, trombones, and saxophones, was a vital element. Classic bands, such as the Wailers wrote songs written about Trench Town (a ghetto), rude boys (street thugs), romance, and even religious themes. In 1965, ska began to take a backseat to a newly evolved type of music, called rock steady, which was more dependent than ska had been on rhythm provided by the bass guitar and drums.

Ska was later exported by traveling Jamaican artists to Great Britain, where it became known as "blue beat." By the mid 1970's, early British punk bands were infusing reggae, a style of music that came from rock steady, into their music. Near the end of the decade, however, there was a resurgence of the influence of ska because of its upbeat, danceable rhythm. This faster paced ska came to be known as two tone. One of the essential messages of two-tone ska was the promotion of racial harmony and of having fun in the face of subjugation. The third wave of ska began in America around 1990. Bands influenced by the two-tone ska scene began to use punk and metal music to a greater extent. The combination, which is much faster than two tone, sounds very different from the original Jamaican brand of ska. In its three different waves, ska has given voice to seemingly voiceless, downtrodden generations. Each time it resurfaces, a new message is taken up, however, the old messages are never forgotten

The passage suggests that two tone music

- A. Resurged near the end of the 1970s
 - II. Influenced bands in America in the 1990s
 - III. Promoted of racial harmony and of having fun in the face of oppression.
- B. I only
- C. II only
- D. III only
- E. II and III only
- F. I, and II, and III

Correct Answer: E

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is E. E. is the best choice because all of the facts presented above are supported by the passage.

QUESTION 39

Coca-Cola, which sold 10 billion cases of soft drinks in 1992, now finds itself asking, where will sales of the next 10 billion cases come from? The answer lies overseas, where income levels and appetites for Western products are at an all time high.

Often, the company that gets into a foreign market earliest dominates that country's market. Coke patriarch Robert Woodruff realized this and unleashed a brilliant ploy to make Coke the early bird in many of the major foreign markets. At the height of World War II, Woodruff proclaimed, "Wherever American boys were fighting, they'd be able to get a Coke." By the time Pepsi tried to make its first international pitch in the 1950s, Coke had established its brand name along with a powerful distribution network.

During the last 40 years, many new markets have emerged. In order to tap into these opportunities, both coke and Pepsi have attempted to find ways to cut through the red tape that thwarts their efforts to conduct business in these new regions.

One key maneuver in the soda wars occurred in 1972, when Pepsi signed an agreement with the Soviet Union that made it the first Western product to be sold to consumers in Russia. This landmark agreement gave Pepsi the upper hand. At present, Pepsi has 23 plants in the former Soviet Union and is the leader in the soft-drink industry in Russia. It outsells Coca-Cola by a ratio of 6 to 1 and is seen there as a local brand, similar to Coke's homegrown reputation in Japan. However, Pepsi has also encountered some obstacles. An expected increase in brand loyalty for Pepsi subsequent to its advertising blitz in Russia has not materialized; even though Pepsi produced commercials tailored to the Russian market and sponsored televised concerts.

Some analysts believe that Pepsi's domination of the Russian market has more to do with pricing. While Pepsi sells for 250 Rubles (about 25 cents) a bottle, Coca-Cola sells for 450 Rubles. Likewise, Pepsi sells their 2 liter economy bottle for 1,300 Rubles, while Coca-Cola's 1.5 liters is marketed at 1,800 rubles. On the other hand, Coca-Cola only made its first inroads into Russia 2 years ago. What's more, although Coca-Cola's bottle and label give it a high-class image, Russians do not perceive Coca-Cola as a premium brand in the Russian market. Consequently, it has so far been unable to capture a market share.

According to the passage, all of the following have been used to attract customers to buy a one of the two brands of soft drink mentioned in the passage EXCEPT A. Offering soft drinks for a limited time at specially reduced prices B. Sponsoring televised concerts C. Designing a bottle and label to create a high-class image D. Staging an advertising blitz including commercials tailored to the local market E.

Being the first country to enter a foreign market

According to the passage, all of the following have been used to attract customers to buy a one of the two brands of soft drink mentioned in the passage EXCEPT

- A. Offering soft drinks for a limited time at specially reduced prices
- B. Sponsoring televised concerts
- C. Designing a bottle and label to create a high-class image
- D. Staging an advertising blitz including commercials tailored to the local market
- E. Being the first country to enter a foreign market

Correct Answer: A

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is A. Answers (b), (C), D. and E. are all mentioned in the passage as ploys used by either Pepsi or Coca Cola to attract new customers

QUESTION 40

Coca-Cola, which sold 10 billion cases of soft drinks in 1992, now finds itself asking, where will sales of the next 10 billion cases come from? The answer lies overseas, where income levels and appetites for Western products are at an all time high.

Often, the company that gets into a foreign market earliest dominates that country's market. Coke patriarch Robert Woodruff realized this and unleashed a brilliant ploy to make Coke the early bird in many of the major foreign markets. At the height of World War II, Woodruff proclaimed, "Wherever American boys were fighting, they'd be able to get a Coke." By the time Pepsi tried to make its first international pitch in the 1950s, Coke had established its brand name along with a powerful distribution network.

During the last 40 years, many new markets have emerged. In order to tap into these opportunities, both coke and Pepsi have attempted to find ways to cut through the red tape that thwarts their efforts to conduct business in these new regions.

One key maneuver in the soda wars occurred in 1972, when Pepsi signed an agreement with the Soviet Union that made it the first Western product to be sold to consumers in Russia. This landmark agreement gave Pepsi the upper hand. At present, Pepsi has 23 plants in the former Soviet Union and is the leader in the soft-drink industry in Russia. It outsells Coca-Cola by a ratio of 6 to 1 and is seen there as a local brand, similar to Coke's homegrown reputation in Japan. However, Pepsi has also encountered some obstacles. An expected increase in brand loyalty for Pepsi subsequent to its advertising blitz in Russia has not materialized; even though Pepsi produced commercials tailored to the Russian market and sponsored televised concerts.

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According to the passage, all of the following have been used to attract customers to buy a one of the two brands of soft drink mentioned in the passage EXCEPT A. Offering soft drinks for a limited time at specially reduced prices B. Sponsoring televised concerts C. Designing a bottle and label to create a high-class image D. Staging an advertising blitz including commercials tailored to the local market E. Being the first country to enter a foreign market

The passage suggests which of the following about the Russian soft drink market?

- A. Price is an unimportant factor in the Russian soft drink market
- B. Two liter economy bottles are more marketable than 1.5-liter economy bottles, especially those sporting a high-class image.
- C. One and a half liter economy bottles are more marketable than two liter economy bottles, if sold at a lower price.
- D. Russian consumers are more likely to purchase a product if they perceive it to be a local brand
- E. The Russian soft drink market is saturated with local brands.

Correct Answer: D

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. The passage states that one of the factors contributing to Pepsi's success in Russia is its perception by the public as a local brand.

QUESTION 41

Coca-Cola, which sold 10 billion cases of soft drinks in 1992, now finds itself asking, where will sales of the next 10 billion cases come from? The answer lies overseas, where income levels and appetites for Western products are at an all time high.

Often, the company that gets into a foreign market earliest dominates that country's market. Coke patriarch Robert Woodruff realized this and unleashed a brilliant ploy to make Coke the early bird in many of the major foreign markets. At the height of World War II, Woodruff proclaimed, "Wherever American boys were fighting, they'd be able to get a Coke." By the time Pepsi tried to make its first international pitch in the 1950s, Coke had established its brand name along with a powerful distribution network.

During the last 40 years, many new markets have emerged. In order to tap into these opportunities, both coke and Pepsi have attempted to find ways to cut through the red tape that thwarts their efforts to conduct business in these new regions.

One key maneuver in the soda wars occurred in 1972, when Pepsi signed an agreement with the Soviet Union that made it the first Western product to be sold to consumers in Russia. This landmark agreement gave Pepsi the upper hand. At present, Pepsi has 23 plants in the former Soviet Union and is the leader in the soft-drink industry in Russia. It outsells Coca-Cola by a ratio of 6 to 1 and is seen there as a local brand, similar to Coke's homegrown reputation in Japan. However, Pepsi has also encountered some obstacles. An expected increase in brand loyalty for Pepsi subsequent to its advertising blitz in Russia has not materialized; even though Pepsi produced commercials tailored to the Russian market and sponsored televised concerts.

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According to the passage, all of the following have been used to attract customers to buy a one of the two brands of soft drink mentioned in the passage EXCEPT A. Offering soft drinks for a limited time at specially reduced prices B. Sponsoring televised concerts C. Designing a bottle and label to create a high-class image D. Staging an advertising blitz including commercials tailored to the local market E. Being the first country to enter a foreign market

The primary purpose of the passage is to

- A. Review the marketing history of two soft drink giants
- B. Contrast two different approaches to marketing soft drinks in the global market
- C. Refute the traditional explanation for Pepsi's success in the Russian soft drink market
- D. Compare how well two soft drink companies have succeeded in a new foreign market
- E. Explain why two soft drink companies have succeeded in a new foreign market

Correct Answer: D

Section: Reading Comprehension Questions**Explanation****Explanation/Reference:**

Explanation:

The best answer is D. The passage mainly compares Pepsi's success in a new foreign market, Russia, with Coca Cola's relative failure. A. is too general. B. is incorrect because both companies have the same general approach.

QUESTION 42

With the proliferation of electronic technologies in the latter part of the twentieth century, many aspects of cultural practice have been redefined. The eradication of physical boundaries that limit discourse and information access has had profound effects upon the manner in which we conduct democracy. Yet, opinions strongly differ over whether or not the growth of electronic networks will result in expanded democracy. On one side of the debate are anti-utopians who fear that with the intrusion of the Internet into many facets of life, personal freedom will be impeded and the existing rift between the "haves" and "have-nots" in society will grow. On the other side, many 'cyber-utopians' believe that new technologies can eliminate the democracy of elected representatives with which so many people are dissatisfied. The Internet, they say, will allow for a true participatory democracy in which citizens can govern themselves without the interference of bureaucrats and legislators. Neither of these theories by themselves can fully address the role of democracy in the age of information. As debates about censorship and encryption have shown, government regulation of the Internet can result in violations of the basic rights of speech set forth in the constitution of the United States. Yet, groups that preach 'Big Brother' theories of paranoia tend to neglect the fact that new technologies can help balance the injustices of traditional power found in a centralized government. At the same time, the likelihood of doing away with the present system of democracy in favor of complete and pure self-governance seems impossible and likely undesirable. Both arguments about the future of the way in which discourse will occur highlight the inherent relationship between communication and democracy. Perhaps a more useful model for the study of this dynamic can be found in the model of the public sphere proposed by Jorgen Habermas. In this realm, free and diverse equals come together to deliberate and discuss pertinent issues without the impediment of external coercion. The ensuing dialogue transpires in a profoundly democratic forum. The dispensing of traditional hierarchies that occurs on the Internet appears to make possible the type of categories necessary for Habermas 'ideal speech situation to occur. However, postmodern critics indicate that the autonomous individual no longer exists in a world where our identities are constructed as much for us as by us. And indeed, much of the postmodern notion of self seems to fit closely with reconfigurations of the subject brought on by electronic technologies. The question that arises then is how might the reconfiguration of communication enabled by the Internet work to create a new form of cyber-democracy' that better represents citizen's interests?

According to the passage, the 'cyber-utopians' mentioned in the passage would most likely be in favor of which of the following innovations?

- A. very new legislation would be voted by every registered voter on the Internet
- B. Government would increase the regulation of the Internet to include a curtailing of politically biased messages
- C. Government would decrease the regulation of the Internet including regulation of politically biased messages
- D. Discourse in legislative assemblies would be broadcast over the Internet
- E. New technologies would gradually replace all forms of democracy

Correct Answer: A

Section: Reading Comprehension Questions**Explanation****Explanation/Reference:**

Explanation:

The best answer is A. According to the passage, 'cyber-utopians' believe that through using the Internet, there could be a true participatory democracy, meaning that all citizens, not just elected representatives could make legislative decisions.

QUESTION 43

With the proliferation of electronic technologies in the latter part of the twentieth century, many aspects of cultural practice have been redefined. The eradication of physical boundaries that limit discourse and information access has had profound effects upon the manner in which we conduct democracy. Yet, opinions strongly differ over whether or not the growth of electronic networks will result in expanded democracy. On one side of the debate are anti-utopians who fear that with the intrusion of the Internet into many facets of life, personal freedom will be impeded and the existing rift between the "haves" and "have-nots" in society will grow. On the other side, many 'cyber-utopians' believe that new technologies can eliminate the democracy of elected representatives with which so many people are dissatisfied. The Internet, they say, will allow for a true participatory democracy in which citizens can govern themselves without the interference of bureaucrats and legislators. Neither of these theories by themselves can fully address the role of democracy in the age of information. As debates about censorship and encryption have shown, government regulation of the Internet can result in violations of the basic rights of speech set forth in the constitution of the United States. Yet, groups that preach 'Big Brother' theories of paranoia tend to neglect the fact that new technologies can help balance the injustices of traditional power found in a centralized government. At the same time, the likelihood of doing away with the present system of democracy in favor of complete and pure self-governance seems impossible and likely undesirable. Both arguments about the future of the way in which discourse will occur highlight the inherent relationship between communication and democracy. Perhaps a more useful model for the study of this dynamic can be found in the model of the public sphere proposed by Jorgen Habermas. In this realm, free and diverse equals come together to deliberate and discuss pertinent issues without the impediment of external coercion. The ensuing dialogue transpires in a profoundly democratic forum. The dispensing of traditional hierarchies that occurs on the Internet appears to make possible the type of categories necessary for Habermas 'ideal speech situation to occur. However, postmodern critics indicate that the autonomous individual no longer exists in a world where our identities are constructed as much for us as by us. And indeed, much of the postmodern notion of self seems to fit closely with reconfigurations of the subject brought on by electronic technologies. The question that arises then is how might the reconfiguration of communication enabled by the Internet work to create a new form of cyber-democracy' that better represents citizen's interests?

The passage supports which of the following statements about government regulation of the Internet?

- A. Government regulation of the Internet can result in infringements upon citizen's constitutional rights of free speech
- B. Government regulation of the Internet can ensure against infringements upon citizen's constitutional rights of free speech
- C. Government regulation of the Internet will make pure self-governance possible
- D. Government regulation of the Internet will promote new technologies that can help balance the injustices of traditional power
- E. Government regulation of the Internet will eradicate physical boundaries that limit discourse and information

Correct Answer: A

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is A. As stated in paragraph three, government regulation of the Internet can result in violations of the basic rights of speech set forth in

the constitution.

QUESTION 44

With the proliferation of electronic technologies in the latter part of the twentieth century, many aspects of cultural practice have been redefined. The eradication of physical boundaries that limit discourse and information access has had profound effects upon the manner in which we conduct democracy. Yet, opinions strongly differ over whether or not the growth of electronic networks will result in expanded democracy. On one side of the debate are anti-utopians who fear that with the intrusion of the Internet into many facets of life, personal freedom will be impeded and the existing rift between the "haves" and "have-nots" in society will grow. On the other side, many 'cyber-utopians' believe that new technologies can eliminate the democracy of elected representatives with which so many people are dissatisfied. The Internet, they say, will allow for a true participatory democracy in which citizens can govern themselves without the interference of bureaucrats and legislators. Neither of these theories by themselves can fully address the role of democracy in the age of information. As debates about censorship and encryption have shown, government regulation of the Internet can result in violations of the basic rights of speech set forth in the constitution of the United States. Yet, groups that preach 'Big Brother' theories of paranoia tend to neglect the fact that new technologies can help balance the injustices of traditional power found in a centralized government. At the same time, the likelihood of doing away with the present system of democracy in favor of complete and pure self-governance seems impossible and likely undesirable. Both arguments about the future of the way in which discourse will occur highlight the inherent relationship between communication and democracy. Perhaps a more useful model for the study of this dynamic can be found in the model of the public sphere proposed by Jorgen Habermas. In this realm, free and diverse equals come together to deliberate and discuss pertinent issues without the impediment of external coercion. The ensuing dialogue transpires in a profoundly democratic forum. The dispensing of traditional hierarchies that occurs on the Internet appears to make possible the type of categories necessary for Habermas 'ideal speech situation to occur. However, postmodern critics indicate that the autonomous individual no longer exists in a world where our identities are constructed as much for us as by us. And indeed, much of the postmodern notion of self seems to fit closely with reconfigurations of the subject brought on by electronic technologies. The question that arises then is how might the reconfiguration of communication enabled by the Internet work to create a new form of cyber-democracy' that better represents citizen's interests?

The author is primarily concerned with

- A. Advocating the use of the electronic technologies to improve democracy
- B. Challenging the assumptions on which a theory of modern democracy is based
- C. Describing events leading to the discovery of democratic uses of electronic technologies
- D. Explaining the importance of electronic technologies to modern politics
- E. Examining the relationship between Internet communication and democracy

Correct Answer: E

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is E. The answer is not A. because the author does not reach any conclusions. D. is incorrect because it does not discuss modern politics in general.

QUESTION 45

With the proliferation of electronic technologies in the latter part of the twentieth century, many aspects of cultural practice have been redefined. The eradication of physical boundaries that limit discourse and information access has had profound effects upon the manner in which we conduct democracy. Yet, opinions strongly differ over whether or not the growth of electronic networks will result in expanded democracy. On one side of the debate are anti-utopians who fear that with the intrusion of the Internet into many facets of life, personal freedom will be impeded and the existing rift between the "haves" and "have-nots" in society will grow. On the other side, many 'cyber-utopians' believe that new technologies can eliminate the democracy of elected representatives with which so many people are dissatisfied. The Internet, they say, will allow for a true participatory democracy in which citizens can govern themselves without the interference of bureaucrats and legislators. Neither of these theories by themselves can fully address the role of democracy in the age of information. As debates about censorship and encryption have shown, government regulation of the Internet can result in violations of the basic rights of speech set forth in the constitution of the United States. Yet, groups that preach 'Big Brother' theories of paranoia tend to neglect the fact that new technologies can help balance the injustices of traditional power found in a centralized government. At the same time, the likelihood of doing away with the present system of democracy in favor of complete and pure self-governance seems impossible and likely undesirable. Both arguments about the future of the way in which discourse will occur highlight the inherent relationship between communication and democracy. Perhaps a more useful model for the study of this dynamic can be found in the model of the public sphere proposed by Jorgen Habermas. In this realm, free and diverse equals come together to deliberate and discuss pertinent issues without the impediment of external coercion. The ensuing dialogue transpires in a profoundly democratic forum. The dispensing of traditional hierarchies that occurs on the Internet appears to make possible the type of categories necessary for Habermas 'ideal speech situation to occur. However, postmodern critics indicate that the autonomous individual no longer exists in a world where our identities are constructed as much for us as by us. And indeed, much of the postmodern notion of self seems to fit closely with reconfigurations of the subject brought on by electronic technologies. The question that arises then is how might the reconfiguration of communication enabled by the Internet work to create a new form of cyber-democracy' that better represents citizen's interests?

According to the passage, which of the following is considered by postmodern critics to be a threat to the notion of self?

- A. The interference of bureaucrats and legislators.
- B. The proliferation of electronic technologies.
- C. Reconfigurations of the subject brought on by electronic technologies.
- D. Traditional hierarchies that occur on the Internet.
- E. The impediment of external coercion.

Correct Answer: C

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is C. In the last paragraph, it says that much of the postmodern notion of self seems to fit closely with reconfigurations of the subject brought on by electronic technologies.

QUESTION 46

Men are primarily and secondarily socialized into believing certain characteristics are definitive in determining their masculinity. These characteristics range from playing violently to not crying when they are injured. The socialization of masculinity in our society begins as early as the first stages of infancy, with awareness of adult gender role differences being internalized by children as young as two years old.

Studies show that advertising imagery equates masculinity with violence by portraying the trait of aggression as instrumental to establishing their masculinity. Lee Bowker, who researched the influence of advertisements on youth, asserts that toy advertisements featuring only boys depict aggressive behavior and that the aggressive behavior produces positive consequences more often than negative. Bowker also looked at commercials with boys that contain references to domination. His results indicated that 68.6% of the commercials positioned toward boys contain incidents of verbal and physical aggression. However there were no cross gender displays of aggressive behavior. Interestingly, not one single-sex commercial featuring girls showed any act of aggression. Bowker's research helps explain that it is not just the reinforcement of a child's close caretakers that lends legitimacy to aggressive masculine tendencies but society as a whole, using the medium of television. William Pollack, a Harvard clinical psychologist, talks about how males have been put in a "gender straightjacket" that leads to anger, despair and often violence. Pollack states that society asks men to put a whole range of feelings and emotions behind a mask and shames them if they display any emotion. Pollack contends that boys are 'shame phobic', even killing, in extreme cases, to avoid dishonor. It appears that the standard defined by society allows men to express their emotion only through anger. Ironically, though these rigid stereotypes of what it means to be a man have been inculcated from an early age, men are often criticized for being one-dimensional in their behavior and emotions.

Women often verbalize a desire for males to be sensitive and express their emotions. But male insensitivity is the culmination of a societal indoctrination begun at birth. Realistically, men are in a damned if they do, damned if they don't situation. If they fail to show their emotions, they are berated for being detached from the essence of what constitutes a human being. On the other hand, if a male decides to expose his emotions, he is often branded effeminate and regarded as inferior to other males who stick closer to their gender's traditional doctrine.

According to the passage, the television commercials examined by Bowker

- A. Showed boys in more acts of verbal and physical aggression than of domination
- B. Showed boys in more acts of domination than of verbal and physical aggression
- C. Showed boys in acts of verbal and physical aggression only towards other boys
- D. Showed boys in acts of verbal and physical aggression only towards other girls
- E. Showed boys in acts of verbal and physical aggression towards other boys and girls

Correct Answer: C

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is C. Bowker's research did not find any cross gender displays of aggressive behavior, i.e. aggression of one gender to another

QUESTION 47

Men are primarily and secondarily socialized into believing certain characteristics are definitive in determining their masculinity. These characteristics range from playing violently to not crying when they are injured. The socialization of masculinity in our society begins as early as the first stages of infancy, with awareness of adult gender role differences being internalized by children as young as two years old.

Studies show that advertising imagery equates masculinity with violence by portraying the trait of aggression as instrumental to establishing their masculinity. Lee Bowker, who researched the influence of advertisements on youth, asserts that toy advertisements featuring only boys depict aggressive behavior and that the aggressive behavior produces positive consequences more often than negative. Bowker also looked at commercials with boys that contain references to domination. His results indicated that 68.6% of the commercials positioned toward boys contain incidents of verbal

and physical aggression. However there were no cross gender displays of aggressive behavior. Interestingly, not one single-sex commercial featuring girls showed any act of aggression. Bowker's research helps explain that it is not just the reinforcement of a child's close caretakers that lends legitimacy to aggressive masculine tendencies but society as a whole, using the medium of television. William Pollack, a Harvard clinical psychologist, talks about how males have been put in a "gender straightjacket" that leads to anger, despair and often violence. Pollack states that society asks men to put a whole range of feelings and emotions behind a mask and shames them if they display any emotion. Pollack contends that boys are 'shame phobic', even killing, in extreme cases, to avoid dishonor. It appears that the standard defined by society allows men to express their emotion only through anger. Ironically, though these rigid stereotypes of what it means to be a man have been inculcated from an early age, men are often criticized for being one-dimensional in their behavior and emotions.

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According to Pollack, one of the reasons for male violence is that

- A. Society shames men who display feelings and emotions other than anger
- B. Men kill in extreme cases to avoid dishonor
- C. Men are often criticized for being one-dimensional in their behavior and emotions
- D. Society uses television as a symbol of its desires
- E. Reinforcement from child's close caretakers lends legitimacy to aggressive masculine behavior

Correct Answer: A

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is A. B. is incorrect because it does not give a reason for violence. C. is a result of the conditioning that leads to violence, not a reason. D. and E. are incorrect because they are not opinions expressed by Pollack.

QUESTION 48

Men are primarily and secondarily socialized into believing certain characteristics are definitive in determining their masculinity. These characteristics range from playing violently to not crying when they are injured. The socialization of masculinity in our society begins as early as the first stages of infancy, with awareness of adult gender role differences being internalized by children as young as two years old.

Studies show that advertising imagery equates masculinity with violence by portraying the trait of aggression as instrumental to establishing their masculinity. Lee Bowker, who researched the influence of advertisements on youth, asserts that toy advertisements featuring only boys depict aggressive behavior and that the aggressive behavior produces positive consequences more often than negative. Bowker also looked at commercials with boys that contain references to domination. His results indicated that 68.6% of the commercials positioned toward boys contain incidents of verbal and physical aggression. However there were no cross gender displays of aggressive behavior. Interestingly, not one single-sex commercial featuring girls showed any act of aggression. Bowker's research helps explain that it is not just the reinforcement of a child's close caretakers that lends legitimacy to aggressive masculine tendencies but society as a whole, using the medium of television. William Pollack, a Harvard clinical psychologist, talks about

how males have been put in a "gender straightjacket" that leads to anger, despair and often violence. Pollack states that society asks men to put a whole range of feelings and emotions behind a mask and shames them if they display any emotion. Pollack contends that boys are 'shame phobic', even killing, in extreme cases, to avoid dishonor. It appears that the standard defined by society allows men to express their emotion only through anger. Ironically, though these rigid stereotypes of what it means to be a man have been inculcated from an early age, men are often criticized for being one-dimensional in their behavior and emotions.

Women often verbalize a desire for males to be sensitive and express their emotions. But male insensitivity is the culmination of a societal indoctrination begun at birth. Realistically, men are in a damned if they do, damned if they don't situation. If they fail to show their emotions, they are berated for being detached from the essence of what constitutes a human being. On the other hand, if a male decides to expose his emotions, he is often branded effeminate and regarded as inferior to other males who stick closer to their gender's traditional doctrine.

The passage suggests that, when compared with television advertisement featuring boys, advertisements that had only girls were found

- A. To have more references to domination
- B. To be 68.6% less aggressive
- C. To be remarkably similar in focus and content
- D. To be replete with extensive examples of cross gender aggression
- E. To be void of any acts of aggression

Correct Answer: E

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is E. Bowker found that not one single-sex commercial featuring girls showed any act of aggression.

QUESTION 49

Juror anonymity was unknown to American common law and jurisprudence in the country's first two centuries. Anonymity was first employed in federal prosecutions of organized crime in New York in the 1980's. Although anonymous juries are unusual since they are typically only empanelled in organized-crime cases, its use has spread more recently to widely publicized cases, such as the federal prosecution of police officers accused of beating Rodney King and the trial of those accused of the 1993 World Trade Center bombing.

In these cases, attorneys selected a jury from a panel of prospective jurors whose names, addresses, ethnic backgrounds and religious affiliations remained unknown to either side. This unorthodox procedure, designed to protect jurors from outside influence and the fear of retaliation, has occasionally been employed in New York federal courts since the trial of drug kingpin Leroy "Nicky" Barnes. Despite apparent benefits, critics assail anonymous juries on the grounds that they are an infringement of the sixth amendment guarantee of an impartial jury and because they present a serious and unnecessary erosion of the presumption of innocence.

Since many attorneys believe trials are frequently won or lost during jury selection, any procedure diminishing the role of counsel in the procedure necessitates close scrutiny and criticism. Opponents of anonymous juries argue that the procedure restricts meaningful voir dire, (questioning of the jury panel), and thereby undermines the defendant's sixth amendment right to an impartial jury. Critics also claim that jurors interpret their anonymity as proof of the defendant's criminal proclivity, thereby subverting the presumption of innocence.

However, consistent with due process and the sixth amendment, the trial judge may refuse to ask prospective jurors any questions not reasonably

calculated to expose biases or prejudices relevant to the case. Although addresses and group affiliations may indicate significant potential for bias, attorneys do not have an unfettered right to this information in every circumstance. Denying access to these facts may indeed constrain an attorney's ability to assemble an ideal jury, but it violates no constitutional right

The primary purpose of the passage is to

- A. Enumerate reasons why anonymous juries are unconstitutional
- B. Discuss whether anonymous juries are an infringement of the sixth amendment
- C. Identify a shortcoming in a scholarly approach to jurisprudence
- D. Define the concept of anonymous juries and explore efforts taken over the last twenty years to increase their use
- E. Review strategies for ensuring that anonymous juries will not infringe on the constitutional right to a fair trial of one's peers

Correct Answer: B

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. The passage introduces the concept of anonymous juries and goes on to discuss their constitutionality.

QUESTION 50

Juror anonymity was unknown to American common law and jurisprudence in the country's first two centuries. Anonymity was first employed in federal prosecutions of organized crime in New York in the 1980's. Although anonymous juries are unusual since they are typically only empanelled in organized-crime cases, its use has spread more recently to widely publicized cases, such as the federal prosecution of police officers accused of beating Rodney King and the trial of those accused of the 1993 World Trade Center bombing.

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It can be inferred from the passage that a jurors ethnic background and religious affiliation

- A. Is considered by defendants not to have a significant effect on the outcome of their trials
- B. Is considered by defendants to have a significant effect on the outcome of their trials
- C. Would be unlikely to have a significant effect on the verdict of a trial
- D. Is considered by attorneys likely to have a significant effect on the verdict of a trial
- E. Is considered by attorneys unlikely to have a significant effect on the verdict of a trial in a widely publicized case

Correct Answer: D

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. In paragraph three it states that many attorneys believe trials are frequently won or lost during jury selection. The passage gives no information on what defendant think about anonymous juries.

QUESTION 51

Juror anonymity was unknown to American common law and jurisprudence in the country's first two centuries. Anonymity was first employed in federal prosecutions of organized crime in New York in the 1980's. Although anonymous juries are unusual since they are typically only empanelled in organized-crime cases, its use has spread more recently to widely publicized cases, such as the federal prosecution of police officers accused of beating Rodney King and the trial of those accused of the 1993 World Trade Center bombing.

In these cases, attorneys selected a jury from a panel of prospective jurors whose names, addresses, ethnic backgrounds and religious affiliations remained unknown to either side. This unorthodox procedure, designed to protect jurors from outside influence and the fear of retaliation, has occasionally been employed in New York federal courts since the trial of drug kingpin Leroy "Nicky" Barnes. Despite apparent benefits, critics assail anonymous juries on the grounds that they are an infringement of the sixth amendment guarantee of an impartial jury and because they present a serious and unnecessary erosion of the presumption of innocence.

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However, consistent with due process and the sixth amendment, the trial judge may refuse to ask prospective jurors any questions not reasonably calculated to expose biases or prejudices relevant to the case. Although addresses and group affiliations may indicate significant potential for bias, attorneys do not have an unfettered right to this information in every circumstance. Denying access to these facts may indeed constrain an attorney's ability to assemble an ideal jury, but it violates no constitutional right

One function of the fourth paragraph of the passage is to

- A. Qualify the extent to which a previously introduced viewpoint may be relevant
- B. Expose the flaw in a criticism put forth in a previous paragraph
- C. Introduce information that supports a theory put forth in a previous paragraph
- D. Support an argument in favor of a given interpretation of a situation
- E. Show the chain of reasoning that led to the conclusions of a specific study

Correct Answer: B

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. Critics of anonymous juries base their arguments on the fact that these juries are unconstitutional. In the fourth paragraph, the author explains that while anonymous juries may not be ideal, they are not unconstitutional.

QUESTION 52

Alexander Calder was one of the most innovative and original American artists of the twentieth century. Calder arrived in Paris in 1926 and devoted himself to a innovative project comprised of animals made out of wire, scraps of cloth, wood, cork, labels, bits of scrap metal and pieces of rubber that he called the Circus. During his performances, Calder invented ways to simulate the flight of birds:

"These are little bits of white paper, with a hole and slight weight on each one, which flutter down several variously coiled thin steel wires which I jiggle so that they flutter down like doves." The Circus was the laboratory of Calder's work; in it he experimented with new formulas and techniques. By 1930, Calder's Circus had developed into one of the real successes of the Montparnasse art world attracting the attention of such renowned artists as Fernand Leger and Joan Micro. Encouragement from the upper echelons of the Parisian art scene undoubtedly led him to try more serious experiments in wire sculptures. Calder eventually becoming interested in the movement of objects, some of which he motorized. In 1933, Calder completed Object with Red Discs, a sculpture he described as a two-meter rod with a heavy sphere, suspended from the apex of a wire, giving it a cantilever effect. It had five thin aluminum discs projected at right angels from five wires, held in position by a spherical counterweight. With this new creation, the idea of the mobile was born. In creating a work named Constellations in 1943, Calder explored the plastic possibilities of mobiles; he used small pieces of wood, which he shaped and sometimes painted. From this point on, Calder's ambition changed focus. He sought more challenging designs. One of Calder's objectives was to display objects in the air, giving the viewer the experience of finding new skies filled with moving and colored constellations. Calder accomplished this in Acoustic Ceiling (1954). Calder's humor was evident in such works as Le Bougnat (1959) and The Pagoda (1963). Later, Calder cut fantastic animals from sheet metal, creating La Vache and Elephant (both 1970) and a mobile entitled Nervous Wreck (1976), which represents the red skeleton of a fish. Calder defined volume without mass and incorporated movement and time in art. His inventions, which redefined certain basic principles of sculpture, have established him as the most innovative sculptor of the twentieth century.

According to the passage, which of the following is an accurate statement about Object with Red Discs?

- A. It was the first mobile created by Calder.
- B. It was one of the many mobiles without motors created by Calder.
- C. It was one of the many motorized mobiles created by Calder.
- D. It was the first motorized mobile created by Calder.
- E. It was the first of the many mobiles without motors created by Calder.

Correct Answer: A

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is A. According to the passage, Object with Red Discs is Calder's first mobile. It states that Calder became interested in the movement of objects, some of which he motorized, but there is no information given on whether this particular sculpture was motorized.

QUESTION 53

Alexander Calder was one of the most innovative and original American artists of the twentieth century. Calder arrived in Paris in 1926 and devoted himself to a innovative project comprised of animals made out of wire, scraps of cloth, wood, cork, labels, bits of scrap metal and pieces of rubber that he called the Circus. During his performances, Calder invented ways to simulate the flight of birds:

"These are little bits of white paper, with a hole and slight weight on each one, which flutter down several variously coiled thin steel wires which I jiggle so that they flutter down like doves." The Circus was the laboratory of Calder's work; in it he experimented with new formulas and techniques. By 1930, Calder's Circus had developed into one of the real successes of the Montparnasse art world attracting the attention of such renowned artists as Fernand Leger and Joan Miro. Encouragement from the upper echelons of the Parisian art scene undoubtedly led him to try more serious experiments in wire sculptures. Calder eventually becoming interested in the movement of objects, some of which he motorized. In 1933, Calder completed Object with Red Discs, a sculpture he described as a two-meter rod with a heavy sphere, suspended from the apex of a wire, giving it a cantilever effect. It had five thin aluminum discs projected at right angles from five wires, held in position by a spherical counterweight. With this new creation, the idea of the mobile was born. In creating a work named Constellations in 1943, Calder explored the plastic possibilities of mobiles; he used small pieces of wood, which he shaped and sometimes painted. From this point on, Calder's ambition changed focus. He sought more challenging designs. One of Calder's objectives was to display objects in the air, giving the viewer the experience of finding new skies filled with moving and colored constellations. Calder accomplished this in Acoustic Ceiling (1954). Calder's humor was evident in such works as Le Bougnat (1959) and The Pagoda (1963). Later, Calder cut fantastic animals from sheet metal, creating La Vache and Elephant (both 1970) and a mobile entitled Nervous Wreck (1976), which represents the red skeleton of a fish. Calder defined volume without mass and incorporated movement and time in art. His inventions, which redefined certain basic principles of sculpture, have established him as the most innovative sculptor of the twentieth century.

According to the passage, all of the following are characteristic of Calder's work EXCEPT

- A. Calder was known to infuse humor into some of his creation
- B. Calder suspended objects from each other
- C. Calder motorized some of his creations
- D. Calder used materials such as metal, cloth, wood, rubber, cork
- E. Calder suspended glass from thin metal wires to create a cantilever effect

Correct Answer: E

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is E. The passage makes no mention of glass as one of the materials Calder used.

QUESTION 54

Alexander Calder was one of the most innovative and original American artists of the twentieth century. Calder arrived in Paris in 1926 and devoted himself to a innovative project comprised of animals made out of wire, scraps of cloth, wood, cork, labels, bits of scrap metal and pieces of rubber that he called the Circus. During his performances, Calder invented ways to simulate the flight of birds:

"These are little bits of white paper, with a hole and slight weight on each one, which flutter down several variously coiled thin steel wires which I jiggle so that they flutter down like doves." The Circus was the laboratory of Calder's work; in it he experimented with new formulas and techniques. By 1930, Calder's Circus had developed into one of the real successes of the Montparnasse art world attracting the attention of such renowned artists as Fernand Leger and Joan Miro. Encouragement from the upper echelons of the Parisian art scene undoubtedly led him to try more serious experiments in wire sculptures. Calder eventually becoming interested in the movement of objects, some of which he motorized. In 1933, Calder completed Object with Red Discs, a sculpture he described as a two-meter rod with a heavy sphere, suspended from the apex of a wire, giving it a cantilever effect. It had five thin aluminum discs projected at right angles from five wires, held in position by a spherical counterweight. With this new creation, the idea of the mobile was born. In creating a work named Constellations in 1943, Calder explored the plastic possibilities of mobiles; he used small pieces of wood, which he shaped and sometimes painted. From this point on, Calder's ambition changed focus. He sought more challenging designs. One of Calder's objectives was to display objects in the air, giving the viewer the experience of finding new skies filled with moving and colored constellations. Calder accomplished this in Acoustic Ceiling (1954). Calder's humor was evident in such works as Le Bougnat (1959) and The Pagoda (1963). Later, Calder cut fantastic animals from sheet metal, creating La Vache and Elephant (both 1970) and a mobile entitled Nervous Wreck (1976), which represents the red skeleton of a fish. Calder defined volume without mass and incorporated movement and time in art. His inventions, which redefined certain basic principles of sculpture, have established him as the most innovative sculptor of the twentieth century.

The author's attitude toward the mobiles of Alexander Calder is best described as

- A. Hesitance
- B. Detachment
- C. Amusement
- D. Admiration
- E. Indifference

Correct Answer: D

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. The author presents only a positive criticism of Calder, stating that he is the most innovative sculptor of the twentieth century.

QUESTION 55

Alexander Calder was one of the most innovative and original American artists of the twentieth century. Calder arrived in Paris in 1926 and devoted himself to a innovative project comprised of animals made out of wire, scraps of cloth, wood, cork, labels, bits of scrap metal and pieces of rubber that he called the Circus. During his performances, Calder invented ways to simulate the flight of birds:

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Leger and Joan Miro. Encouragement from the upper echelons of the Parisian art scene undoubtedly led him to try more serious experiments in wire sculptures. Calder eventually becoming interested in the movement of objects, some of which he motorized. In 1933, Calder completed Object with Red Discs, a sculpture he described as a two-meter rod with a heavy sphere, suspended from the apex of a wire, giving it a cantilever effect. It had five thin aluminum discs projected at right angles from five wires, held in position by a spherical counterweight. With this new creation, the idea of the mobile was born. In creating a work named Constellations in 1943, Calder explored the plastic possibilities of mobiles; he used small pieces of wood, which he shaped and sometimes painted. From this point on, Calder's ambition changed focus. He sought more challenging designs. One of Calder's objectives was to display objects in the air, giving the viewer the experience of finding new skies filled with moving and colored constellations. Calder accomplished this in Acoustic Ceiling (1954). Calder's humor was evident in such works as Le Bournat (1959) and The Pagoda (1963). Later, Calder cut fantastic animals from sheet metal, creating La Vache and Elephant (both 1970) and a mobile entitled Nervous Wreck (1976), which represents the red skeleton of a fish. Calder defined volume without mass and incorporated movement and time in art. His inventions, which redefined certain basic principles of sculpture, have established him as the most innovative sculptor of the twentieth century.

It can be inferred from the passage that which of the following statements was true of the Parisian art scene?

- A. The work of Fernand Leger and Joan Miro was influenced by that of Alexander Calder.
- B. The work of Alexander Calder was influenced by that of Fernand Leger and Joan Miro.
- C. Fernand Leger and Joan Miro had earned success in the art world before Alexander Calder.
- D. Alexander Calder had earned success in the art world before Fernand Leger and Joan Miro.
- E. Calder's Circus earned more accolades from the upper echelons of the Parisian art scene than any other work in its time.

Correct Answer: C

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is C. According to the passage, Calder's early work attracting the attention of such renowned artists as Fernand Leger and Joan Miro. It can be inferred that Leger and Miro were already famous when Calder was just starting out

QUESTION 56

Intuitively, intellectual skills and perceptual-motor skills seem very different because perceptual-motor skills appear more primitive. Ontogenetically, perceptual-motor skills develop before intellectual skills, or at least before most intellectual skills are manifested. Phylogenetically, creatures "high on the evolutionary ladder" are more obviously capable of intellectual skills than are creatures "lower down". Perceptual-motor skills also seem more closely tied to specific forms of expression. Being a chess player does not mean one can only play with pieces of a certain size, that one can only move pieces with one's right hand, and so on. By contrast, being a violinist means one can play an instrument whose size occupies a fairly narrow range and that one must play with a rather rigid assignment of functions to effectors (bowing with the right hand, and fingering with the left). The seeming narrowness of this perceptual-motor skill expression, contrasted with the seeming openness of intellectual skill expression, seems to follow from intellectual skills having symbolic outcomes and perceptual-motor skills having non-symbolic outcomes. Symbolic outcomes need not be realized in specific ways and can rely on abstract rules. Non-symbolic outcomes, by contrast, need more specific forms of realization and seem to depend on restricted associations between stimuli and response. Another difference between intellectual and perceptual-motor skills is that the two kinds of skill seem to be represented in different parts of the brain. For example, structures homologous to the optic tectum, a nucleus located on the dorsal surface of the midbrain, have a common

function in all vertebrates--coordinating visual, auditory, and somatosensory information relevant to the control of orienting movements of the eyes, ears, and head. Similarities in structure and function between these and other brain areas associated with perceptual-motor behavior suggest that mechanisms for control of perceptual-motor skills are both highly specialized and conserved across species. In contrast, what distinguishes the human brain from the brains of other species -- even closely related ones -- is the differential growth of brain regions most strongly associated with intellectual skills, such as the association areas of the cerebral cortex.

The contention that these areas serve intellectual functions is supported by a large body of clinical and experimental literature. Together, these diverse sources of information suggest that perceptual-motor and intellectual skills depend on distinct brain circuits.

The passage is chiefly concerned with

- A. Presenting a new theory and describing a new method to test that theory
- B. Suggesting an alternative to an outdated research method
- C. Demonstrating that perceptual-motor skills are closely tied to specific forms of expression
- D. Arguing that two seemingly dissimilar skills are more alike than was previously assumed
- E. Presenting evidence on two dissimilar skills that resolves a contradiction

Correct Answer: D

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. The passage presents evidence to back the claims that intellectual skills and perceptual-motor skills are more similar than was once believed.

QUESTION 57

Intuitively, intellectual skills and perceptual-motor skills seem very different because perceptual-motor skills appear more primitive. Ontogenetically, perceptual-motor skills develop before intellectual skills, or at least before most intellectual skills are manifested. Phylogenetically, creatures "high on the evolutionary ladder" are more obviously capable of intellectual skills than are creatures "lower down ". Perceptual-motor skills also seem more closely tied to specific forms of expression. Being a chess player does not mean one can only play with pieces of a certain size, that one can only move pieces with one's right hand, and so on. By contrast, being a violinist means one can play an instrument whose size occupies a fairly narrow range and that one must play with a rather rigid assignment of functions to effectors (bowing with the right hand, and fingering with the left). The seeming narrowness of this perceptual-motor skill expression, contrasted with the seeming openness of intellectual skill expression, seems to follow from intellectual skills having symbolic outcomes and perceptual-motor skills having non-symbolic outcomes. Symbolic outcomes need not be realized in specific ways and can rely on abstract rules. Non-symbolic outcomes, by contrast, need more specific forms of realization and seem to depend on restricted associations between stimuli and response. Another difference between intellectual and perceptual-motor skills is that the two kinds of skill seem to be represented in different parts of the brain. For example, structures homologous to the optic tectum, a nucleus located on the dorsal surface of the midbrain, have a common function in all vertebrates--coordinating visual, auditory, and somatosensory information relevant to the control of orienting movements of the eyes, ears, and head. Similarities in structure and function between these and other brain areas associated with perceptual-motor behavior suggest that mechanisms for control of perceptual-motor skills are both highly specialized and conserved across species. In contrast, what distinguishes the human brain from the brains of other species -- even closely related ones -- is the differential growth of brain regions most strongly associated with intellectual

skills, such as the association areas of the cerebral cortex.

The contention that these areas serve intellectual functions is supported by a large body of clinical and experimental literature. Together, these diverse sources of information suggest that perceptual-motor and intellectual skills depend on distinct brain circuits.

The author mentions the game of chess in paragraph two primarily in order to

- A. Present an example of an intellectual skill the mastery of which is not closely tied to specific forms of expression.
- B. Present an example of an intellectual skill the mastery of which is closely tied to specific forms of expression.
- C. Present an example of a skill that is both an intellectual skill and a perceptual-motor skill, the mastery of which is closely tied to specific forms of expression.
- D. Present an example of a perceptual-motor skill the mastery of which is not closely tied to specific forms of expression.
- E. Present an example of a perceptual-motor skill the mastery of which is closely tied to specific forms of expression.

Correct Answer: A

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is A. Chess is an intellectual skill the mastery of which is not closely tied to specific forms of expression. In other words, once one has learned to play the game, one can vary the way one plays, by using one's left hand instead of one's right, for instance.

QUESTION 58

Intuitively, intellectual skills and perceptual-motor skills seem very different because perceptual-motor skills appear more primitive. Ontogenetically, perceptual-motor skills develop before intellectual skills, or at least before most intellectual skills are manifested. Phylogenetically, creatures "high on the evolutionary ladder" are more obviously capable of intellectual skills than are creatures "lower down". Perceptual-motor skills also seem more closely tied to specific forms of expression. Being a chess player does not mean one can only play with pieces of a certain size, that one can only move pieces with one's right hand, and so on. By contrast, being a violinist means one can play an instrument whose size occupies a fairly narrow range and that one must play with a rather rigid assignment of functions to effectors (bowing with the right hand, and fingering with the left). The seeming narrowness of this perceptual-motor skill expression, contrasted with the seeming openness of intellectual skill expression, seems to follow from intellectual skills having symbolic outcomes and perceptual-motor skills having non-symbolic outcomes. Symbolic outcomes need not be realized in specific ways and can rely on abstract rules. Non-symbolic outcomes, by contrast, need more specific forms of realization and seem to depend on restricted associations between stimuli and response. Another difference between intellectual and perceptual-motor skills is that the two kinds of skill seem to be represented in different parts of the brain. For example, structures homologous to the optic tectum, a nucleus located on the dorsal surface of the midbrain, have a common function in all vertebrates--coordinating visual, auditory, and somatosensory information relevant to the control of orienting movements of the eyes, ears, and head. Similarities in structure and function between these and other brain areas associated with perceptual-motor behavior suggest that mechanisms for control of perceptual-motor skills are both highly specialized and conserved across species. In contrast, what distinguishes the human brain from the brains of other species -- even closely related ones -- is the differential growth of brain regions most strongly associated with intellectual skills, such as the association areas of the cerebral cortex.

The contention that these areas serve intellectual functions is supported by a large body of clinical and experimental literature. Together, these diverse sources of information suggest that perceptual-motor and intellectual skills depend on distinct brain circuits.

It can be inferred from the passage that the optic tectum

- A. Functions similarly in animal and in plants
- B. Functions similarly in vertebrates and invertebrates
- C. Is located in a comparable area of the brains of humans and giraffes
- D. Coordinates somatosensory moment in snakes
- E. Has a much more sophisticated structure than the cerebral cortex

Correct Answer: C

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is C. According to the passage, the optic tectum occupies the same area of the brain in all vertebrates (animals with a spinal column).

QUESTION 59

Considerable debate exists in the self-perception literature over the impact of positively biased self-perceptions on social and psychological functioning. Positively based self-perceptions are those in which an individual has a more positive opinion of himself than objective indicators warrant. One view suggests that positive perceptual biases are characteristic of normal human thought across a variety of domains and correlate positively with good mental and psychological health. Certain researchers and clinicians have even proposed that by boosting self-concepts, symptoms of depression and levels of aggression may be reduced.

Investigators on the other side of the debate maintain that when most positive self-perceptions are compared to an objective criterion, they appear neither positively biased nor adaptive. In fact, Baumeister, Smart, and Boden suggest that positively biased self-concepts may have a 'dark side'. They proposed that it is persons with very positive self-views who are prone to be aggressive. As a result, building up individuals' self-perceptions may serve only to increase levels of aggression rather than curb them.

According to Baumeister et al., not all individuals with positive self-perceptions are going to be interpersonally aggressive. Rather, individuals who are extremely positive in their perceptions of themselves and their functioning are proposed to be the most likely to become angry and potentially violent. The mechanism that triggers aggressive behavior by these individuals has been suggested to be negative social feedback that challenges their positive self-views. Such threats to positive self-esteem give rise to anger and hostility.

If negative social information is encountered that challenges established positive self-perceptions, Baumeister et al. propose that individuals must choose to either accept the feedback and lower their self-perceptions or reject the feedback to maintain their positive self-views. The chosen reaction then influences their subsequent affective states and behavioral expressions. By accepting the external appraisals and adjusting self-perceptions downward, dysphonic feelings and social withdrawal may result. Conversely, the rejection of the validity of the unfavorable feedback results in feelings of anger and resentment toward the source of the threat. Dodge and colleagues demonstrated that children who interpret social cues as threatening direct

their anger and aggression at the peers who gave the negative evaluations. Anger stemming from the receipt of social criticism is a way to deny the legitimacy of the negative information. By directing hostile reactions toward the source of the negative feedback, the influx of disconfirming information may end. Unless individuals react against the self-esteem threat, they may be compelled to revise their self-concepts negatively, in line with the information provided. By discounting the negative social feedback, individuals can protect themselves from dysphoric feelings and maintain their positively biased self-perceptions, but they may be setting themselves up to become interpersonally aggressive.

Although positively biased self-perceptions may place individuals at risk for negative social feedback and subsequent increases in aggressive behavior, not all positive self-concepts are suggested to be harmful. The relationship between positive self-perceptions and aggression may depend on the degree of perceptual distortion (i.e., moderate vs. extreme distortion). Baumeister (1989) and Baumeister et al. (1996) proposed that an optimal range of moderate bias might exist within which mental health is encouraged. Maladjustment in psychological and social functioning is suggested to occur when the degree of bias of self-perceptions shifts from moderate to extreme levels. Extremely negative and positive perceptual bias would be related to different but equally harmful difficulties.

The primary purpose of this passage is to

- A. Present two explanations of a phenomenon and reconcile the differences between them
- B. Discuss a plan for investigation of a phenomenon that is not yet fully understood
- C. Challenge the validity of a theory by presenting evidence that the opposite is true in some cases
- D. Summarize two theories and suggest a third theory that overcomes the problems encountered in the first two
- E. Present evidence that resolves a contradiction

Correct Answer: C

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is C. The passage challenges the validity of the theory that positively biased self-perception is closely correlated with normal human thought and good mental health by showing how a very high self-perception may lead to violent behavior.

QUESTION 60

Considerable debate exists in the self-perception literature over the impact of positively biased self-perceptions on social and psychological functioning. Positively based self-perceptions are those in which an individual has a more positive opinion of himself than objective indicators warrant. One view suggests that positive perceptual biases are characteristic of normal human thought across a variety of domains and correlate positively with good mental and psychological health. Certain researchers and clinicians have even proposed that by boosting self-concepts, symptoms of depression and levels of aggression may be reduced.

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Although positively biased self-perceptions may place individuals at risk for negative social feedback and subsequent increases in aggressive behavior, not all positive self-concepts are suggested to be harmful. The relationship between positive self-perceptions and aggression may depend on the degree of perceptual distortion (i.e., moderate vs. extreme distortion). Baumeister (1989) and Baumeister et al. (1996) proposed that an optimal range of moderate bias might exist within which mental health is encouraged. Maladjustment in psychological and social functioning is suggested to occur when the degree of bias of self-perceptions shifts from moderate to extreme levels. Extremely negative and positive perceptual bias would be related to different but equally harmful difficulties.

According to the passage, which of the following is mentioned as a factor in determining whether an individual with positively biased self-perception would actually be likely to perform an act of violence?

- A. The gap between what the individual thinks about himself and how good he really is
- B. The gender of the individual
- C. The anger level of the individual's peers
- D. The individual's ability to ignore dysphoric feelings
- E. The validity of the unfavorable feedback

Correct Answer: A

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is A. It is the distortion between how the person really is and how he perceives himself that is the most important factor, as opposed to the level of self-perception itself.

QUESTION 61

Considerable debate exists in the self-perception literature over the impact of positively biased self-perceptions on social and psychological functioning. Positively based self-perceptions are those in which an individual has a more positive opinion of himself than objective indicators warrant. One view suggests that positive perceptual biases are characteristic of normal human thought across a variety of domains and correlate positively with good mental and psychological health. Certain researchers and clinicians have even proposed that by boosting self-concepts, symptoms of depression and levels of aggression may be reduced.

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If negative social information is encountered that challenges established positive self-perceptions, Baumeister et al. propose that individuals must choose to either accept the feedback and lower their self-perceptions or reject the feedback to maintain their positive self-views. The chosen reaction then influences their subsequent affective states and behavioral expressions. By accepting the external appraisals and adjusting self-perceptions downward, dysphoric feelings and social withdrawal may result. Conversely, the rejection of the validity of the unfavorable feedback results in feelings of anger and resentment toward the source of the threat. Dodge and colleagues demonstrated that children who interpret social cues as threatening direct their anger and aggression at the peers who gave the negative evaluations. Anger stemming from the receipt of social criticism is a way to deny the legitimacy of the negative information. By directing hostile reactions toward the source of the negative feedback, the influx of disconfirming information may end. Unless individuals react against the self-esteem threat, they may be compelled to revise their self-concepts negatively, in line with the information provided. By discounting the negative social feedback, individuals can protect themselves from dysphoric feelings and maintain their positively biased self-perceptions, but they may be setting themselves up to become interpersonally aggressive. Although positively biased self-perceptions may place individuals at risk for negative social feedback and subsequent increases in aggressive behavior, not all positive self-concepts are suggested to be harmful. The relationship between positive self-perceptions and aggression may depend on the degree of perceptual distortion (i.e., moderate vs. extreme distortion). Baumeister (1989) and Baumeister et al. (1996) proposed that an optimal range of moderate bias might exist within which mental health is encouraged. Maladjustment in psychological and social functioning is suggested to occur when the degree of bias of self-perceptions shifts from moderate to extreme levels. Extremely negative and positive perceptual bias would be related to different but equally harmful difficulties.

The passage discusses the likelihood of violence stemming from which of the following types of individuals?

- A. An individual with a moderately positive self-perception who receives negative feedback from his peers
- B. An individual with a highly positive self-perception who receives negative feedback from his peers
- C. An individual with a highly negative self-perception who receives positive feedback from his peers
- D. An individual with a highly negative self-perception who receives negative feedback from his peers
- E. An individual with a dark side who receives negative feedback from his peers

Correct Answer: B

Section: Reading Comprehension Questions

Explanation

Explanation/Reference:

Explanation:

According to the passage, when negative social information is encountered by a person with a highly elevated level of self-perception, it may lead to violence.

QUESTION 62

Unemployment in Winston County has risen only 4% since I took office. Under my predecessor, unemployment rose 14%. Clearly, my economic policies are far more effective. Which of the following must be true in order for this argument to be valid?

- A. Winston County's population dropped significantly during the current administration.
- B. The national unemployment rate increased by 12% during the previous administration but only 2% during the current administration.
- C. Key socioeconomic variables such as the state of the national economy and the demographics of Winston County is comparable for each administration.
- D. Key policy changes, such as increased job training for the unemployed, were implemented under the current administration.
- E. Tax incentives have been implemented to bring new businesses to Winston County.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

In order for the two administrations to be compared, the socioeconomic variables must be comparable. If Winston County's economy had relied largely upon a factory that closed down during the previous administration, then the unemployment rate would necessarily rise considerably following that event. The state of the national, state, and local economies and the demographic makeup of Winston County (e.g., no significant increase or decrease in population) need to be nearly identical for the speaker to make a fair comparison and claim that his or her policies are more effective. If Winston County's population dropped significantly (choice a), it could explain why the unemployment rate dropped as well--but it does not support the speaker's claim that his or her policies "are far more effective." Choice b, which reflects the state of the national economy, also offers an explanation for the change in unemployment rates in Winston County, again contradicting the speaker's claim that his or her economic policies made the difference. If the speaker had implemented key policy changes (choice d) or tax incentives (choice e), they could have significantly reduced unemployment. However, the unemployment rates still cannot be compared unless other variables are comparable.

QUESTION 63

Morning Glory, the coffee shop on the corner, has lost nearly 50% of its business because a national retail coffee chain opened up a store down the street. Instead of closing up shop, the owner of Morning Glory plans to draw in customers by offering coffee, tea, and pastries at much lower prices than the national coffee chain.

The owner's plan of action is based on all of the following assumptions EXCEPT

- A. some customers will choose the coffee shop that offers the lowest price.
- B. the quality of Morning Glory's coffee is comparable to that of the national coffee chain.
- C. Morning Glory can afford to cut its profit margin in order to lower prices.
- D. Morning Glory's customers are very loyal.
- E. the national coffee chain will not lower its prices in order to compete with Morning Glory.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The owner's plan--to lower prices to attract customers--assumes that some customers will choose the lower price (choice a), that the quality of Morning Glory's products is comparable to its competitor (choice b), that Morning Glory can afford to offer lower prices (choice c), and that its competitor will also not lower its prices (choice e). The plan does not rest on any assumptions about the loyalty of Morning Glory customers (choice d). Indeed, there is evidence that the customers are not loyal, because Morning Glory has already lost 50% of its business.

QUESTION 64

When romance novels were located in the back of the bookstore, they accounted for approximately 6% of total sales. Since we moved romance novels close to the front of the store and put several books on display, sales of romance novels have increased to 14% to 18% of total sales. All of the following conclusions can logically be drawn from this argument EXCEPT

- A. customers who bought one romance novel are likely to come back for another.
- B. customers are more likely to buy books located near the front of the bookstore than at the back.
- C. the display caught the interest of people who might not have otherwise purchased a romance novel.
- D. customers believe that bookstores put their best books near the front of the store.
- E. sales of romance novels may increase even more if the section were moved all the way to the front.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The significant increase in sales after the relocation of the books indicates that customers are more likely to buy books at the front of the store (choice b) and that the display may have caught the interest of people who might not otherwise purchase a romance novel (choice c). It is also logical to conclude that sales would further increase if the books were moved even farther toward the front of the store (choice e). Choices b and e and the increase in sales all suggest that customers believe the best books are near the front of the store (choice d). The only conclusion that cannot logically be drawn from this scenario is that customers will come back to purchase more romance novels (choice a). The data does not indicate repeat purchases for

customers.

QUESTION 65

With more and more classes being offered online, more and more students will earn their degrees in virtual universities. Students in California will graduate from schools in New York without ever leaving their state. Because online courses offer flexibility without geographic boundaries, virtual degrees will be in greater demand, and colleges and universities should invest the bulk of their resources in developing online degree programs. All of the following, if true, are valid objections to this argument EXCEPT

- A. online courses are more time consuming for faculty to develop than regular courses.
- B. many students need the ability to attend class outside of regular classroom hours.
- C. some students prefer the traditional classroom to the virtual classroom.
- D. not every course is suitable for an online environment.
- E. there is no way to ensure the authenticity of a student's work in an online environment.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

All of the choices except b offer reasons why online degree programs are problematic, suggesting that resources should not be focused on developing online degree programs. Choice b offers support for the argument by stating that the flexibility of online classes will attract students who would not normally be able to attend regular classes.

QUESTION 66

Property values in South Orange, New Jersey, have nearly doubled in the last six years. South Orange is located in Essex County, 17 miles from New York City. Which of the following, if true, best explains the results described in the statement?

- A. the proximity of South Orange to New York City
- B. the completion of a direct rail line to New York City
- C. the addition of 240 housing units in South Orange
- D. improved schools and a renovated downtown in South Orange
- E. the relocation of a major technical corporation to Union, New Jersey, two miles from South Orange

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The direct rail line is the most logical explanation for an increase in property values. The proximity to New York City in itself (choice a) would not necessarily increase property values, but the addition of public transportation that provides direct access to the city would make the town a more desirable place to live. When a place becomes more desirable, real-estate values increase. Choice c, the addition of housing units, is likely an effect of the direct rail line and an increase in the desirability of the location. The improvement of the schools and the renovation of the downtown (choice d) may or may not be related to the increase in property values. It would be logical to conclude that funds for improving the schools and downtown could be gleaned from additional resources from increased property taxes, another effect of increased property values. The relocation of a major corporation to a neighboring town (choice e) could account for the increased desirability of property in South Orange, but the direct access to the city is a more compelling reason. Perhaps a few hundred persons may work in the corporation, but many thousands are likely to want an easy commute to the city.

QUESTION 67

One out of four heart surgery patients at St.Vincent's dies from complications during surgery. Only one out of six heart surgery patients at St.Mary's dies from complications during surgery. If you need heart surgery, make sure you go to St.Mary's, not St.Vincent's.

Which of the following, if true, is the best reason to reject this argument?

- A. St.Vincent's specializes in heart surgery for elderly and high-risk patients.
- B. St.Mary's surgical equipment is more up to date than St.Vincent's.
- C. St.Vincent's has the most renowned heart surgeon in the country on its staff.
- D. St.Vincent's offers flexible payment options for balances not covered by insurance.
- E. Two doctors who used to work at St.Mary's now work at St.Vincent's.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

Statistics can be very deceiving. In this case, based only on the numbers, St.Mary's seems like a safer place to undergo heart surgery. But what you do not know about St.Mary's and St.Vincent's can lead you to make a poor choice. If St.Vincent's specializes in heart surgery for elderly and high-risk patients (choice a), then it is logical that it would have a higher rate of mortality among its patients. Indeed, given this fact, the difference in mortality rates may make a case for going to St.Vincent's instead of St.Mary's. Assuming you are not an elderly or high-risk patient, to make an informed choice, you would need statistics about St.Vincent's mortality rates for surgery on patients who are not elderly or high risk. Up-to-date equipment is important (choice b), but the condition of the patients prior to surgery and the skill of the surgeons are more important considerations. The fact that St.Vincent's has the best heart surgeon in the country (choice c) is compelling, but it does not contradict the statistics. The payment options (choice d) are irrelevant if you do not survive the surgery, and there can be many reasons why the doctors who worked at St.Mary's are now at St.Vincent's (choice e), so you cannot consider this factor without more information.

QUESTION 68

DNA evidence has increasingly been used in court to prove guilt and to exonerate the innocent. Because so many convicted felons have been cleared by DNA evidence, all cases in which someone was convicted largely on circumstantial evidence should be called into question and reviewed. Which of

the following, if true, would most strengthen this argument?

- A. One in three convictions today rests largely on DNA evidence.
- B. DNA evidence is admissible even after the statute of limitations has expired.
- C. Of every ten cases in which DNA evidence becomes available post-conviction, five convictions are overturned.
- D. DNA evidence is 99.8% accurate.
- E. DNA evidence is very difficult to falsify or tamper with.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The fact that would most strengthen this argument is the percentage of cases in which DNA evidence overturned prior convictions. If half of all cases resulted in erroneous convictions that were later cleared by DNA evidence, then that should certainly draw other convictions into doubt. The fact that one in three of today's convictions rest on DNA evidence has no bearing on prior convictions, so choice a is incorrect. Similarly, the admissibility of DNA evidence (choice b) has no bearing on the quality of prior convictions. That DNA evidence is accurate (choice d) and difficult to tamper with (choice e) strengthens the argument for the use of DNA evidence in court, but it does not directly strengthen the argument that prior convictions should be called into doubt.

QUESTION 69

For each question, select the best answer from the choices given.

Without a doubt, one of America's greatest science-fiction writers is Kurt Vonnegut, who has written dozens of stories and novels, including the masterpiece *Slaughterhouse Five*. Yet for decades, Vonnegut denied that what he was writing was science fiction. Today, however, Vonnegut embraces his rightful place as a master of the genre. All of the following, if true, are helpful in accounting for the phenomenon described in this passage EXCEPT

- A. early in Vonnegut's career, science fiction was largely considered by critics to be an inferior genre.
- B. Vonnegut did not want to be pigeonholed as a science-fiction writer.
- C. as a young author, Vonnegut's favorite writers were all science-fiction writers.
- D. science fiction has become a legitimate literary genre.
- E. science fiction has become an increasingly popular genre (for readers and writers alike) because of the increased importance of science and technology in our lives.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

Choice c is not helpful in accounting for Vonnegut's early reluctance to be identified as a science-fiction writer because it is not relevant. The other choices are directly related to the phenomenon and help us understand why he did not originally want to be called a science-fiction writer but now welcomes the categorization.

QUESTION 70

The greatest failure of modern American society is its rejection of the extended family. It is no wonder our society is so violent and so many Americans feel a deep sense of isolation and overwhelming stress.

This argument is based on all of the following assumptions EXCEPT

- A. Americans value independence more than interdependence.
- B. people who live in extended families feel less stress.
- C. a large percentage of Americans feels isolated and alone.
- D. living in an extended family engenders a strong sense of belonging.
- E. deep feelings of isolation and overwhelming stress lead to antisocial and violent behavior.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The argument that American society is violent and many Americans feel isolated and stressed (conclusion) because they have rejected the practice of extended families (premise) is based on several assumptions about extended families (e.g., that they ease stress and engender a sense of belonging), about Americans (e.g., that they feel isolated and alone), and about the effects of isolation and stress. It may be true that many Americans value independence more than interdependence, but that assumption is not directly related to the argument. It does not serve as a link between the premise and the conclusion.

QUESTION 71

The original Star Wars film (1977), in which Luke Skywalker saved Princess Leia and battled against the evil Empire, was followed by two equally successful sequels--The Empire Strikes back and Return of the Jedi. Nearly 25 years later, the Star Wars prequels have arrived, and they are even more successful than the original series. The prequels (The Phantom Menace, Attack of the Clones, and the soon-to-be released Episode III) have shattered box office records, filling theaters with audiences of young children, teenagers, and adults alike.

Which of the following conclusions can properly be drawn from this statement?

- A. The prequels are better than the original and its sequels.
- B. The prequels have been marketed more effectively than the original and its sequels.

- C. The Star Wars films have phenomenal special effects.
- D. Fans of the original films have always wanted more Star Wars stories.
- E. The themes and epic struggles of the Star Wars movies appeal to viewers of all generations.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The evidence in the passage points to one conclusion: that the Star Wars films appeal to audience-goers of all ages. The passage tells us that the prequels are even more successful than the originals and that the films are popular among "young children, teenagers, and adults alike." This suggests that viewers of all ages appreciate the themes in the films. The passage does not compare the quality or marketing of the prequels to the sequels, so choices a and b are incorrect. It does not discuss the special effects in the film, so choice c is incorrect. Fans of the original film may have wanted more Star Wars stories, but the passage does not state this, so choice d is not a logical conclusion to the argument.

QUESTION 72

For years, Americans have been told to stay away from fat. Feeding the market of those anxiously watching their waistlines, food manufacturers have filled grocery store shelves with low-fat and fat-free foods. Now, however, some researchers are blaming the fat-free craze for the American crisis of obesity.

Foods without fat, they argue, leave us feeling unsatisfied and craving even more food. As a result, we end up eating a whole bag of low-fat potato chips when we would have only eaten half a bag of regular (fat-laden) potato chips.

Which of the following is the most logical conclusion that can be drawn from the passage?

- A. Avoid a no-fat diet, but eat low-fat foods.
- B. You will likely eat less if you eat foods with fat.
- C. Potato chips of any sort are unhealthy.
- D. The key to weight management is to avoid cravings.
- E. Fat-free foods should be banned from stores.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The passage argues that foods with little or no fat leave people feeling unsatisfied, so they are likely to eat more than they would of foods that have a substantial fat content. Although the evidence suggests that eating a low-fat diet is better than a no-fat diet (choice a), choice b is a more logical

conclusion, especially because the focus in the passage is how much we eat. The health value of potato chips, which are only used as an example, is not discussed, so choice c is incorrect. Choice d is incorrect because the passage suggests that weight control is a matter of what kind of foods people eat, not the suppression of cravings. The passage does not state that fat-free foods should be banned from stores, so e is not a logical conclusion.

QUESTION 73

Nearly a decade ago, researchers at Brandeis University conducted an interesting experiment with small robots. The robots were programmed to get as many individual points as possible by finding small metal pucks and taking them to a nest in a corner of the lab. Robots were rewarded with points whenever they found a puck. But their excessive self-interest led to poor performance as robots repeatedly interfered with one another and battled over pucks. Researchers then reprogrammed the robots to share information: Robots would announce when they found a puck and listen to what other robots had to say. The robots were able to gather twice as many pucks as they had before they were reprogrammed.

Which of the following conclusions can be drawn from the experiment described in this passage?

- A. Robots can be taught human behaviors.
- B. The robots were poorly programmed in the first experiment.
- C. The researchers were shocked by the difference in results between the two experiments.
- D. Sharing information can dramatically improve the productivity of a group.
- E. Self-interest leads to unproductive behavior.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The huge difference in results after the robots were reprogrammed makes d the most logical conclusion: Sharing information can dramatically improve the productivity of a group. Choice a is incorrect for several reasons. First, self-interest and sharing aren't exclusively human behaviors; animals are also driven by self-interest, and many animals also share (information, food, etc.). Second, the robots were programmed, not taught. The experiment doesn't really show that the robots learned anything; they did what they were programmed to do, and as a result, they were more successful. Choice b is incorrect because the passage does not suggest that the robots were incorrectly programmed in the first experiment. Nothing indicates how the researchers felt about the results, so choice c is not a logical conclusion. Although the robots were far less productive when they were self-interested, choice e is not logical because they did indeed gather some pucks and because in many instances self-interest can result in highly productive behavior (e.g., self-preservation).

QUESTION 74

The late 1990s saw the comeback of many rock-n-roll bands that had enjoyed great fame in the 1960s and 1970s, but had fallen into relative obscurity in the 1980s and early 1990s. Bands such as Santana and Aerosmith released new albums at the end of the millennium and embarked on worldwide tours to sold-out audiences.

Which of the following, if true, best explains the phenomenon described in this passage?

- A. Not much good rock-n-roll was produced in the late 1990s.
- B. These bands were able to blend elements of classic rock with the new sound of the late 1990s to appeal to a wide audience.
- C. The late 1990s saw an increasing nostalgia for the peace-loving era of the 1960s and early 1970s.
- D. The bands simply got better with age.
- E. A new generation of listeners discovered classic rock.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The lack of good music (choice a) may help account for older bands making a comeback, but this is not the best explanation. More convincing is the notion that older bands were able to blend their old sounds with new sounds to appeal to a wide audience--people who enjoyed their older music and people who enjoy the sounds of contemporary music. This would help explain their renewed popularity, because they still have a core of older fans as well as a large contingent of newer fans (younger listeners who were not necessarily familiar with their older music). Choice c is incorrect because a nostalgia for the 1960s and 1970s would mean the bands' older music would be in demand, not their new music. Choice d is incorrect because this does not account for their lapse into "relative obscurity." Choice e is incorrect for the same reason as c--if a new generation of listeners discovered classic rock, then they would be more interested in the bands' older work.

QUESTION 75

Two small-business owners, Jensen and Ling, could not be more different. Jensen is easy going, easy to talk to, good at delegating responsibility, and quick to acknowledge the contributions of others. Ling, however, is often high strung, generally unfriendly, and unable to give up any authority; she is determined to be involved in every decision. This explains why Jensen's business is successful while Ling's business has failed.

The conclusion of this argument is based upon all of the following assumptions EXCEPT

- A. the personality of a business owner is the main factor in the success of the business.
- B. a business leader with Jensen's type of personality is more effective than one with Ling's personality.
- C. Jensen and Ling were in direct competition with each other.
- D. Jensen and Ling had similar educational backgrounds and a comparable level of business experience.
- E. Jensen and Ling had comparable businesses operating under comparable circumstances.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

Jensen and Ling did not have to be in direct competition with each other; indeed, they did not even have to know the other business existed. Rather, this argument hinges on other important assumptions. Clearly, the most important assumption is a, that the business leader's personality is the main factor in

the business's success or failure. The premises focus on the personality traits of Jensen and Ling and jump to the conclusion that their personalities made the difference in their business success. Choice b is incorrect for the same reason; it also forms a logical link between the premises and the conclusion. Choices d and e are incorrect because they state assumptions that are essential in making this an apples- to-oranges comparison. Whatever their personality differences, this comparison does not work if Jensen and Ling were not similarly equipped (with education and experience) and in comparable businesses operating under comparable circumstances

QUESTION 76

Although no conclusive scientific evidence proves that angels exist, many highly intelligent and respectable people believe they exist and have even claimed to have spoken with angels. It is therefore reasonable to assume that angels do exist, but we just don't have the means to prove their existence.

All of the following, if true, are valid objections to this argument EXCEPT

- A. even people who are usually honest lie on occasion.
- B. well-respected people often have deep religious beliefs, so they are likely to believe in angels, even if evidence suggests angels do not exist.
- C. respectable people often want to be seen as highly moral people, and contact with angels would make them seem "chosen."
- D. many people believe that angels are messengers of God, and a belief in angels therefore provides evidence of their belief in God.
- E. people who claim to see angels provide very similar descriptions of the angels.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

This statement would actually support the argument that angels exist. All of the other choices, however, offer valid objections to the argument.

QUESTION 77

In 1980, 18% of American families lived under the poverty line. In 1990, only 12% of families lived under the poverty line. But that doesn't mean fewer families were living in poverty. Indeed, the statistics hide the fact that more families were actually living in destitution. The difference in percentages appears because the poverty line was redefined and the income level was reduced. Thus, many families were above the poverty line even though they did not earn any more income. Which of the following statements, if true, would most strengthen this argument?

- A. This kind of statistical manipulation is appalling.
- B. A nationwide recession occurred in 1980 and an economic boom occurred in the 1990s.
- C. Republicans were in power in 1980, whereas Democrats were in power in 1990.
- D. The poverty line is regularly adjusted (income level raised) to account for inflation.
- E. The number of welfare recipients in 1990 was 11% higher than in 1980.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

Including the fact that the poverty line is regularly raised to account for inflation would significantly strengthen the conclusion that more families were living in poverty in 1990 despite the lower percentage of families under the poverty line. Choice a is an opinion that expresses anger at statistical manipulation but does not provide a premise that would further support the conclusion. Choice b offers information that might help account for a normal difference in the number of families living in poverty, but the passage doesn't argue that fewer families were in poverty in 1990; rather, it argues the opposite. Choice c is essentially irrelevant. Democrats and Republicans may have certain agendas and institute certain social policies, but this is not relevant unless the reader knows a specific Democratic or Republican measure taken to affect the poverty level. Choice e suggests that many more poor people needed assistance in 1990 than 1980, but it is essentially irrelevant without further information showing the correlation between welfare recipients and the poverty line; it may be an apples-to-oranges comparison. You would need to know if any significant changes in welfare policy occurred in the interim.

QUESTION 78

Kylie eats at Moe's Diner every Thursday, but last Thursday she ate at Joe's. On Friday, she was sick to her stomach. It must have been the food at Joe's.

Which of the following is the best criticism of this argument?

- A. It does not take into consideration other possible causes.
- B. It confuses cause and effect.
- C. It assumes that she would not have gotten sick eating the same food at Moe's.
- D. It does not identify the specific type of illness.
- E. It does not describe how long the illness lasted.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

Kylie's stomachache could have been caused by any number of factors other than the food at Joe's. Perhaps she ate or drank something that evening that did not agree with her. Perhaps she was nervous or anxious about something and that caused her stomach to be upset. Perhaps she caught the stomach flu. Reversing causation is not possible, so choice b is incorrect. The argument does not necessarily assume she wouldn't have gotten sick eating the same food at Moe's (choice c); the passage doesn't say what she ate or whether she even could have eaten the same thing at Moe's. The only assumption here is that she was sickened by the food at Joe's. The argument does not specify the type of illness (choice d) or describe how long it lasted (choice e), but these are not the best criticisms of the argument. Knowing more about the kind of illness she had might help us rule out food poisoning or other food related illnesses, but the best criticism is clearly a.

QUESTION 79

Brianna's has been feeling jittery over the last three weeks. She has also been putting in extra hours at work, sometimes pulling double shifts. To stay

alert, she has been drinking six or seven cups of coffee a day rather than her usual two or three cups. The jitters are interfering with her ability to do her work, so she has decided to stop drinking coffee altogether to eliminate the jitters. All of the following are valid criticisms of Brianais's plan of action EXCEPT

- A. the jitters may be due to lack of sleep, not excessive caffeine.
- B. the jitters may be worsened by her total withdrawal from caffeine.
- C. Brianais has never had the jitters before.
- D. Brianais only gets the jitters when she drinks too much coffee.
- E. the jitters may be caused by anxiety due to personal problems or stress at work.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

Because she has never had the jitters before, it is important for Brianais to try to do something to stop them. Therefore, this is not a criticism of her plan of action. The other options, however, all point out reasons why her plan of action may not be effective. If the jitters are caused by lack of sleep (choice a) or anxiety (choice e), then her plan will fail. Similarly, if her jitters worsen by a total withdrawal from caffeine (choice b), her plan will also fail. The fact that Brianais often gets the jitters when she drinks too much coffee (choice d) suggests that Brianais does not need to stop drinking coffee altogether; she just needs to cut back to her regular amount.

QUESTION 80

Pop singer Clive Jones has been nominated for six Grammy Awards and his new album is enjoying its eighth consecutive week at number one on the charts. It is safe to say that Jones is today's best pop artist.

Which of the following assumptions is most pivotal to this argument?

- A. Jones's previous albums were also chart-toppers.
- B. Jones's next album will outsell his current release.
- C. Grammy nominations and record sales are accurate measures of an artist's greatness.
- D. Jones will win several of the Grammy Awards for which he has been nominated.
- E. Jones is popular with both fans and music critics.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The unstated assumption that connects the premise to the conclusion in this argument is that Grammy nominations and record sales are accurate measures of an artist's greatness. Obviously, this is a highly debatable assumption, but it does provide the necessary link between the premise and the conclusion. The success of Jones's previous albums (choice a) and his next album (choice c) are irrelevant to the conclusion, which is focused on his success today. Jones may or may not win those Grammy awards (choice d), but that is essentially irrelevant as well; it does not logically connect the premise to the conclusion. Jones's popularity with both fans and critics (choice e) is important, but it likewise does not provide a logical connection.

QUESTION 81

Anuj wants to lose about 15 pounds. He knows several people who have lost 10 to 20 pounds in just one month with a particular over-the-counter diet pill. Anuj plans to buy the diet pill in order to lose 15 pounds in the same time period. Based on the previous information, for Anuj's plan to succeed, which of the following must be true?

- A. Anuj's body type, exercise regimen, and diet must be similar to those of the people who lost 15 pounds with the pill.
- B. Anuj must avoid certain foods that may counteract the effectiveness of the pill.
- C. Anuj must take the diet pill at the same time every day.
- D. Anuj must adjust his diet to include more protein and fewer carbohydrates.
- E. Anuj must monitor his weight loss very carefully.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

Anuj's plan of action is based on the assumption that he will have the same success with the diet pill as his acquaintances. In order for this to be true, however, a must also be true--he must have a similar body type, exercise regimen, and diet. If, for example, he does not exercise but those people who lost weight with the pill did, he might not have the same results. Anuj may have to avoid certain foods (choice b) or take the pill at the same time each day (choice c) in order for it to be most effective, but these assumptions do not underlie his belief that he will have the same results as the others. Choice d is incorrect because the passage does not state what sort of diet the others had, and again this plan of action rests upon the assumption that he will have similar results. Anuj should probably monitor his weight loss carefully (choice e), but this is just common sense and not relevant to his plan of action.

QUESTION 82

In her old apartment, Hermione had trouble sleeping. She had difficulty falling asleep and would wake up several times in the night. Since Hermione moved from that apartment into her new home, she has been sleeping better. She is able to fall asleep quickly and usually stays asleep through the night. All of the following, if true, could account for the phenomenon described in the passage EXCEPT

- A. Hermione had loud neighbors when she lived in the apartment.
- B. Hermione was suffering from anxiety about buying a house and moving.
- C. Hermione discovered that she was allergic to cats and gave her cat away when she moved.

- D. Hermione's apartment building was constructed prior to 1940, when stricter building codes were put into law.
- E. Hermione was having difficulties in her relationship with her boyfriend right before she moved.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The fact that her apartment building was constructed prior to 1940 is essentially irrelevant to her sleep difficulties in her apartment. All of the other factors, however, could logically account for her sleep difficulties and the fact that they disappeared once she moved.

QUESTION 83

Toby has breakfast at Good Eats Diner every morning before work. He always orders the same thing: two eggs over easy with three strips of extra crispy bacon, unbuttered wheat toast, and a large coffee. Today, he ordered a bagel with light cream cheese and a large orange juice. Something must be wrong with Toby.

All of the following, if true, are also plausible explanations for Toby's behavior EXCEPT

- A. Toby has decided to limit the cholesterol in his diet.
- B. a new cook started at Good Eats today.
- C. Toby simply wanted a change of pace.
- D. Toby has gone on a diet.
- E. Toby has decided to become a vegetarian.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

Perhaps something was wrong with Toby, causing him to deviate from his normal course of action, but there are many other plausible explanations, including his decision to avoid foods high in cholesterol (choice a), a simple desire for a change of pace (choice c), a decision to go on a diet and eat foods lower in fat (choice d), or a decision to eat only vegetarian foods (choice e).

QUESTION 84

Zsa Zsa has just opened a beauty salon in her neighborhood. The neighborhood already has two salons --one that caters mostly to older women and one that seems to cater to a general clientele. Zsa Zsa has decided to cater to young clientele to create a niche for herself in the neighborhood. Zsa Zsa's plan of action is based on all of the following assumptions

EXCEPT

- A. enough young people live in the neighborhood to establish a large enough client base
- B. Zsa Zsa can provide the styles and services that will appeal to younger customers.
- C. younger clients in Zsa Zsa's neighborhood will be able to afford her services.
- D. Zsa Zsa will establish friendly relationships with the owners of the other salons.
- E. young clients desire services and styles that are not available at the other salons.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The relationship that Zsa Zsa has with her competitors will have little effect on her plan of action. Rather, her plan rests on the other assumptions provided. If she is to succeed in creating a niche for herself in the neighborhood, she needs to have a large enough population of young people (choice a), provide the styles and services those clients desire (choice b), offer those styles and services at prices her clients can afford (choice c), and offer styles and services not available at her competitors (choice e).

QUESTION 85

Mary Shelley's 1818 classic *Frankenstein* has been the most-taught novel on college campuses in the country for the past 10 years. This is due primarily to the worries about scientific responsibility brought on by the recent surge of advances in science and technology, especially biotechnology. Which of the following statements, if true, would be most helpful in evaluating this argument?

- A. *Frankenstein* is considered the first science-fiction novel.
- B. Most people who have not read the novel mistakenly assume that *Frankenstein* is the monster, not the scientist who created the monster.
- C. In the novel, Victor Frankenstein creates a monster and then abandons it, refusing to take responsibility for his creation.
- D. In the novel, *Frankenstein's* creature causes a great deal of destruction because he is constantly rejected by others.
- E. Most Americans are opposed to cloning human beings.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The fact that Dr. Frankenstein brings a creature to life but then abandons that creature, refusing to take responsibility for his creation, tells us that one of *Frankenstein's* main themes is scientific responsibility.

This would help explain why college professors concerned about scientific responsibility would choose this book. The other choices may be interesting and informative, but they do not help you evaluate the argument because they do not provide information that enables you to ascertain the relevance of the conclusion.

QUESTION 86

Arthur: Do animals have rights? Well, they have feelings, and I think if you can feel pain, you do have some rights, particularly the right not to have pain inflicted on you. Brandon: Animals like lions would kill me if they were hungry for food. That inflicts pain on me, all right! Which of the following is the best criticism of Brandon's response?

- A. He assumes that because some animals kill humans, humans have a right to kill those animals.
- B. He does not give specific examples to support his position.
- C. He attacks Arthur rather than addressing the issue.
- D. He takes an absolute position without allowing for exceptions.
- E. He brings in a different issue rather than addressing the question of whether or not animals have rights.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

Brandon does not directly address the issue of whether or not animals have rights. Instead, he brings in another issue--whether or not animals would kill him if they were hungry for food--and thus shifts the argument to his pain rather than the right of animals to be free of pain. Thus, the best criticism of this argument is that Brandon brings in a red herring. Brandon's response is not based on any assumption about human beings' right to kill animals, so choice a is incorrect. He does give one specific example (lions), so choice b is incorrect. He does not attack Arthur, so choice c is incorrect. Finally, he does not make an absolute statement including all animals, so choice d is also incorrect.

QUESTION 87

People who own dangerous pets such as poisonous snakes or ferocious dogs are morally and legally responsible for their pet's actions. If someone is hurt by such a pet, the owner should be held 100% accountable.

All of the following statements, if true, would strengthen this argument EXCEPT

- A. the physical whereabouts of pets are completely under the control of their owners.
- B. a pet is the legal property of a person, and people are responsible for damages inflicted by their property.
- C. a pet is like a young child in that its whereabouts must constantly be controlled and behaviors trained and monitored.
- D. pet owners cannot completely control their pets' behaviors.
- E. a dangerous pet is no different from a dangerous weapon, and it must be cared for accordingly.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

If pet owners cannot completely control their pets' behaviors, then this undermines the conclusion that pet owners should be 100% accountable for their pets' actions. The other choices, however, all make claims that support the argument for accountability.

QUESTION 88

Since Lotta came out of her shell, she has made a lot of new friends.

Which of the following is the best criticism of this statement?

- A. Lotta may have come out of her shell because she made new friends.
- B. Lotta may have come out of her shell because of accomplishments at her new job.
- C. Lotta may not have very close relationships with any of these new friends.
- D. Lotta often has periods of introversion.
- E. Lotta is a very likeable person.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The problem with this statement is that it may reverse causation. Perhaps Lotta made new friends after she came out of her shell, but it is equally possible that Lotta's new friends helped her come out of her shell. Lotta's accomplishments at work may have helped her come out of her shell (choice b), but that is not a relevant criticism of the argument; it has nothing to do with the question of making friends after coming out her shell. The level of intimacy of her new friendships (choice c) is also irrelevant to an analysis of the argument because it does not make any claims about the depth of the relationships. If Lotta often has periods of introversion (choice d), then she also has periods of coming out of her shell, so this is not relevant (again, it does not address the cause/effect issue). If Lotta is very likeable (choice e), it might explain an ease in making new friends or the number of new friends, but it does not connect the two pieces of the statement.

QUESTION 89

All across Europe, midwives are the most common choice for prenatal care and delivery. In America, however, midwives are the minority, with most women choosing obstetricians to help them deliver their babies. But using midwives could save millions of dollars a year in healthcare costs. All of the following information would be helpful in evaluating this argument EXCEPT

- A. a comparison of the cost of an obstetrician birth and a midwife birth
- B. a comparison of the percentage of costly procedures such as episiotomies and Caesarian sections in midwife- and obstetrician-led births
- C. a description of the author's experience with a midwife
- D. a comparison of the procedures in an obstetrician birth and midwife birth
- E. a description of how midwives are used in healthcare systems in other countries

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

All of the choices except c provide information that would help evaluate the conclusion that using midwives could save millions of dollars a year in healthcare costs. Only choice c is irrelevant. The author's own experience with a midwife may or may not be typical and does not address the issue of whether or not midwives are more cost effective.

QUESTION 90

Increasing the speed limit to 65 miles per hour or more on highways is dangerous and only leads to more accidents. Whenever the highway speed has been increased, accident rates have increased in that state. Maine raised its turnpike speed to 65 mph in November, and more fatal accidents occurred in December than any other month in the year. Highway fatalities in December and January combined were up 18% from November.

All of the following are valid criticisms of this argument EXCEPT

- A. it does not explain why the speed limit was originally set at 55 mph.
- B. it does not specify whether the accident rate increase was in accidents only on the highways where the speed limit was increased or on all highways.
- C. it does not consider other possible causes for increases in accidents, such as winter weather driving conditions in Maine.
- D. it only cites statistics for one state.
- E. it does not acknowledge that speed is not the only cause of accidents.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The issue in the argument is whether increased speed limits are dangerous, so the argument should focus on proving that this is the case. The fact that the argument does not discuss why the speed limit was originally set at 55 mph is essentially irrelevant, so it is not a valid criticism of the argument. All of the other options, however, express valid criticisms and point out significant flaws in the reasoning.

QUESTION 91

Don't be surprised if we have an unusually cold winter this year. The last time we had a very cold winter was 12 years ago, and the last time before that was 12 years earlier, and the time before that was also 12 years earlier. Brace yourself for another cold one.

Which of the following would most strengthen this argument?

- A. a chart showing the average temperature of winters over the last 11 years
- B. a chart comparing the actual winter temperatures to predictions for the last 36 years
- C. a chart with the average winter temperatures for the last 36 years
- D. weather predictions from the National Weather Center
- E. a discussion of weather patterns that create colder winters

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The conclusion of the argument is that we should expect an unusually cold winter because we are in the twelfth year of a cycle in which every twelfth year is unusually cold. Although the 12-year cycle might indeed have existed for the last 36 years, it goes against our understanding of weather that such a pattern will continue. In all likelihood, the fact that the twelfth year has been unusually cold for the last 36 years is coincidence, not a set meteorological pattern. Thus, the information that would most strengthen the argument is predictions from the National Weather Center, which uses advanced forecasting technology and analysis of existing weather patterns to predict the weather and could estimate the general tenor of the approaching season. The charts in choices a through c would be useful in proving that such a pattern has existed the last 36 years, but they do not provide strong evidence of the weather to come. A discussion of weather patterns (choice e) would be informative, but it would not strengthen the argument about the approaching winter weather.

QUESTION 92

The main principle of feng shui is that our environment must be ordered to permit and encourage the free flow of energy. One of the fundamental steps is to eliminate clutter, which blocks the flow of energy.

Based upon the previous information, which of the following statements is also likely to be true?

- A. Proper ventilation will improve the flow of energy.
- B. Objects should be dispersed as evenly as possible around the room.
- C. Square objects should be placed in corners.
- D. Walls should be kept bare except for mirrors.
- E. Light colored paints are best.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The information provided in the passage leads to the conclusion that objects should be dispersed evenly around the room. This would "encourage the free flow of energy" and reduce clutter, because objects would not be crammed together. Proper ventilation (choice a) may indeed improve the flow of energy, but that cannot be concluded from the passage. The passage does not indicate where square objects should be placed (choice c), whether walls should be kept bare (choice d), or whether light colored paints are best (choice e), so these choices are incorrect.

QUESTION 93

Of course, the Task Force on Crime is going to conclude that crime is on the way up. If they conclude it's on the way down, they would have to disband, wouldn't they?

Which of the following assumptions is most pivotal to this argument?

- A. The Task Force is more concerned with its own existence than with carrying out its mission.
- B. The Task Force is led by an adversary of the speaker.
- C. The speaker was not asked to serve on the Task Force.
- D. The speaker's leadership ability will be questioned by the findings of the Task Force.
- E. The Task Force wants to hire more police officers and other law enforcement personnel.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

This argument assumes that the main concern of the Task Force is its own existence. The speaker assumes that the Task Force will present findings that would ensure that the Task Force is not disbanded. The passage did not identify the speaker's relationship to the leader of the Task Force (choice b) or indicate that the speaker was not asked to join the Task Force (choice c). Neither of these assumptions makes a logical connection between the premise and conclusion of the argument. It is possible that the speaker's leadership ability will be questioned by the Task Force findings (choice d) or that the Task Force wants to hire more police officers (choice e), but these two assumptions also do not link the premise and conclusion.

QUESTION 94

Organic farmers are looking for non-chemical methods to rid their crops of pests. Giving crops a slight electric shock has no ill effect on crops but rids them of caterpillars. This method should be employed by organic farmers all over the country. Which of the following, if true, most strongly supports the view that it would not be advisable to try to eradicate agricultural pests with the method mentioned above?

- A. Most species of caterpillar are subject to some natural predators.
- B. Many agricultural pests do not go through a caterpillar stage.
- C. This method also kills insects that are agriculturally beneficial.
- D. Since caterpillars of different species appear at different times of the year, several shocks would be necessary.
- E. No large-scale production facilities exist today for the product that electrifies crops.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

If electrifying crops kills beneficial pests, it may do as much or more harm than good.

QUESTION 95

A study of business partnerships in which one partner's management style differs from that of the other partner reveals that such partnerships are more likely to be fraught with problems and to ultimately end in dissolution. Thus, mismatched management styles can seriously jeopardize a business partnership.

Which of the following, if true, most seriously weakens the argument above?

- A. Business partnerships in which both partners have the same management style also occasionally have disagreements that can jeopardize the partnership.
- B. The management style of individuals tends to vary from year to year.
- C. The individuals who have management style that differ significantly from those of their partners tend to argue little with spouses at home.
- D. Partners who are considering dissolution have been found to express hostility by adopting a different management style from that of their partners.
- E. According to a recent study, most people's management styles can be controlled and modified easily.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

If partners who are considering dissolution have been found to express hostility by adopting a different management style from that of their partners, then the different management styles are the result and not the cause of the discordance between the partners.

QUESTION 96

A report on the use of monosodium glutamate in food concluded, "Most Americans who consume monosodium glutamate regularly are not being harmed." Critics of the report insist the conclusion be changed to, "Most Americans who consume monosodium glutamate do not show visible symptoms of harm by the substance, such as abnormal rashes or slower rates of metabolism." Which of the following, if true, provides the best logical justification for the critics' insistence that the report's conclusion be changed?

- A. Some Americans who consume monosodium glutamate regularly are being harmed by the substance.
- B. Monosodium glutamate could be causing long term damage for which symptoms have not yet become visible.

- C. The report does not compare harm caused to Americans who consume monosodium glutamate with harm caused to people in other countries.
- D. Monosodium glutamate has been added to a growing number of commonly consumed foods during the past fifteen years.
- E. The severity of damage by monosodium glutamate differs from person to person.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

If there is a possibility that monosodium glutamate will cause long-term harm, then the absence of symptoms cannot be taken as proof that Americans who consume monosodium glutamate regularly are not being harmed.

QUESTION 97

The CEO of Black's International has proposed replacing their Marmacil semiconductor manufacturing equipment with Fasttech equipment since it costs 30 percent less to train new staff on the Fasttech equipment. Those opposed to the change have pointed out the savings in training cost does not justify the change. Instead, they suggested that the company hire only people who already know how to use the Marmacil equipment.

Which of the following, if true, most seriously undermines the objection to the replacement of Marmacil semiconductor manufacturing equipment with Fasttechs?

- A. Currently all employees in the company are required to attend workshops on how to use Marmacil semiconductor manufacturing equipment in new applications.
- B. Once employees learn how to use semiconductor-manufacturing equipment; they tend to change employers more readily than before.
- C. Experienced users of Marmacil equipment command much higher salaries than do prospective employees who have no experience in the use of such equipment.
- D. The average productivity of employees in the general manager's company is below the average productivity of the employees of its competitors.
- E. The high costs of replacement parts make Marmacil computers more expensive to maintain than Fasttech semiconductor manufacturing equipment.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

Those objecting to the change claim that the advantage of Fast tech's relatively low cost can be mitigated by hiring experience users of Marmacil semiconductor manufacturing equipment. However, if such people command much higher salaries as choice C states, doing so would not result in savings to the company.

QUESTION 98

A pharmaceutical company developed a new diuretic reported to cause fewer side effects than their old diuretic, which was still being manufactured.

During the first year that both were sold, the earlier medication far outsold the new one; the manufacturer thus concluded that reducing side effects was not the customers' primary consideration.

Which of the following, if true, would most seriously weaken the manufacturer's conclusion?

- A. Both hospitals and patients buy diuretics from this pharmaceutical company.
- B. Many customers consider older medications a better safety risk than new ones, since more is usually known about the safety of the earlier drugs.
- C. Many customers of this pharmaceutical company also bought medications from companies who did not produce new diuretics reported to cause fewer side effects.
- D. The newer diuretic can be used by all the patients who could use the earlier diuretic.
- E. There was no significant difference in price between the newer diuretic and the earlier diuretic.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The manufacture's conclusion was that reducing side effects was not the customers' primary consideration. Choice B states that customers consider older medication a better safety risk, so those customers bought the older diuretic out of safety considerations.

QUESTION 99

Canadian wheat farmers produced so much wheat over the last season that wheat prices plummeted. The government tried to boost wheat prices by offering farmers who agreed not to harvest 20 percent of their wheat field compensation up to a specified maximum per farm. The Canadian government's program, if successful, will not be a net burden on the budget. Which of the following, if true, is the best basis for an explanation of how this could be so?

- A. If prices were allowed to remain low, the farms would be operating at a loss, causing the government to lose tax revenue on farm profits.
- B. Wheat production in several countries declined the year that the compensation program went into effect in Canada.
- C. The first year that the compensation program was in effect, wheat acreage in Canada was 5% below its level in the base year for the program.
- D. The specified maximum per farm meant that for very large wheat farms the compensation was less per acre for those acres than they were for smaller farms.
- E. Farmers who wished to qualify for compensation program could not use the land not harvested for wheat to grow another crop.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The program will not be a net burden on the budget because money spent on compensation can be made up by money collected through taxation of the farms.

QUESTION 100

Eclampsia in pregnancy is especially prevalent among women who are seriously malnourished. In order to achieve early detection of eclampsia in these individuals, public health officials distributed pamphlets explaining the importance of early detection of this potentially fatal disease.

Which of the following, if true, is the best criticism of the use of the pamphlet as a method of achieving the public health officials' goal?

- A. Many prenatal diseases produce symptoms that cannot be detected by the patient.
- B. Once Eclampsia has been detected; the effectiveness of treatment can vary from person to person.
- C. The pamphlet was sent to all town residents, including those individuals who are not pregnant.
- D. Eclampsia is much more common in very young and very old mothers, rather than in those at the height of their productive years.
- E. Pregnant women who are seriously malnourished are often homeless and thus unlikely to receive and read the pamphlet

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The pamphlet is incapable of achieving the public health officials' goal if it does not reach its target audience.

QUESTION 101

Technological improvements have made electric cars far more cost-efficient in the last decade. However, the threshold of economic viability for electric cars (that is, the cost of running an electric car compared to a gasoline powered car) has remained unchanged. Which of the following, if true, does most to help explain why the increased cost-efficiency of electric cars has not decreased its threshold of economic viability?

- A. The cost of manufacturing gasoline-powered cars has fallen dramatically.
- B. The reduction in the cost of manufacturing electric cars has occurred despite increased raw material costs for those cars.
- C. Technological changes have increased the efficiency of gasoline-powered cars.
- D. Most electricity is generated by coal-fired or nuclear, rather than oil-fired, power plants.
- E. When the price of oil increases, reserves of oil not previously worth exploiting become economically viable.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

Improvements in electric cars have been matched by improvements in gasoline-powered cars so that their economic viability has not improved.

QUESTION 102

Generally, marine biologists enter their field with the goal of doing important new research. They expect their colleagues to have similar goals. Therefore, when any marine biologist becomes a household name in the field of documentary nature films, most other scientists conclude that this biologist should no longer be regarded as a true colleague. The explanation offered above for the low esteem in which marine biologists who make documentary films are held by research scientists assumes that

- A. Serious scientific research is not a solitary activity, but relies on active cooperation among a group of colleagues
- B. Research scientists tend not to regard as colleagues those scientists whose renown they envy
- C. A scientist can become famous as a marine biologist who makes documentary films without having completed any important research
- D. Research scientists believe that those who are well known as marine biologists who make documentary films are not motivated to do important new research
- E. No important new research can be accessible to or accurately assessed by those who are not themselves scientists

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The conclusion that biologists who make documentaries should no longer be regarded as true colleagues is based on the assumption that such biologists will not longer do important new research

QUESTION 103

New stores financed by investors have a much lower failure rate than stores financed by other means. Source of financing, therefore, must be a more important causative factor in the success of a new store than are such factors as the location of the store, the quality of the staff, or the choice of merchandise. Which of the following, if true, most seriously weakens the argument above?

- A. Investors tend to be more responsive than others to changes in a new store's financial needs.
- B. The strategic planning of a new store is a less important factor in the long-term success of the business than are the personal characteristics of the owner.
- C. More than half of all new stores close within three years.
- D. The management of new stores is generally less formal than the management of ongoing stores.
- E. Investors base their decisions to fund new stores on such factors as the personal characteristics of the owner, location of the store, and marketing goals.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is E. The argument is that source of financing must be a more important causative factor in the success of a new store than other factors. Choice E suggests that it is not the source of financing that makes the difference, rather that investors are more likely to finance new stores in which the other factors - good locations, good quality of staff etc. - are good.

QUESTION 104

The proportion of Afro-American students enrolled in Gilmore Community College has increased over the past decades. This is partly shown by the fact that in 1965, only 6 percent of Afro-American between twenty and twenty-three in the town of Gilmore were enrolled in college, while in 1997, 13 percent of the Afro-Americans between twenty and twenty-three were enrolled in Gilmore Community College.

To evaluate the argument above, it would be most useful to compare 1965 and 1997 with regard to which of the following characteristics

- A. The percentage of Afro-American students between twenty and twenty-three who were not enrolled in Gilmore Community College
- B. The percentage of Afro-American students between twenty and twenty-three who graduated from Gilmore Community College
- C. The percentage of Afro-American students who, after attending Gilmore Community College, entered highly paid professions
- D. The non-Afro-American students between twenty and twenty-three who were enrolled in Gilmore Community College
- E. The percentage of Afro-American students who graduated from high school

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. The argument presents a substantial increase in the proportion of Afro-Americans between twenty and twenty-three who were enrolled in Gilmore Community College as evidence that there was an increase in the proportion of Gilmore Community College students who were Afro-Americans. This evidence would lack force if a similar increase in college enrollment had occurred among students who are not Afro-American.

QUESTION 105

When three Indian-owned trains purchased from Transcontinental Trains crashed within a two month time period, the Indian parliament ordered the acquisition of three new Transcontinental trains as replacements. This decision surprised many because it is customary for users to shun a product after it is involved in accidents. Which of the following, if true, provides the best indication that the decision of the Indian government was well supported?

- A. Although during the previous year only one transcontinental train crashed, competing manufacturers had a perfect safety record.
- B. The Transcontinental-built trains crashed due to sabotage, but because of the excellent quality of the trains, fire was averted increasing the number of survivors.
- C. The Indian Railway Commission issued new guidelines for trains in order to standardize safety requirements governing inspections.
- D. Consumer advocates pressured two major railway companies into purchasing safer trains so that the public would be safer.
- E. Many Transcontinental Train employees had to be replaced because they found jobs with the competition

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. If the train crashes were caused by a factor that had nothing to do with the train itself, such as sabotage, and the quality of the train decreased the number of fatalities, then there is good reason to purchase additional trains from Transcontinental.

QUESTION 106

Recently, a court ruled that current law allows tour operators that travel to potentially dangerous locations, such as the Amazon, to reject potential customers if there is a 50 percent chance that the traveler would contract malaria on the trip. The presiding judge justified the ruling, saying that it protected both travelers and tour operators.

This use of his court ruling as part of the law could not be effective if which of the following were true?

- A. The best interests of travelers often conflict with the interests of tour operators.
- B. There is currently no legally accepted method existing for calculating the risk of contracting malaria as a result of being exposed to it in a particular location.
- C. Some trips might involve health risks other than the risk of malaria.
- D. Travelers who have a 50 percent chance of contracting malaria may be unaware that their risk is so great.
- E. The number of people signing up to take trips with a tour company might decline if the company, by screening applicants for risk of malaria, seemed to suggest that the trip entailed high risk of getting the disease

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. The use of the court ruling as part of the law could not be effective if there were no accepted way of determining who the people susceptible to malaria were. Choice b states that there is no accepted method of calculating the risk of contracting malaria.

QUESTION 107

Since the national postal service in country X was privatized six months ago, delays in the delivery of mail have increased by 20 percent. To combat this problem, more sorting and delivering staff must be hired in the busiest regions of the country.

Which of the following, if true, casts the most doubt on the effectiveness of the solution proposed above

- A. The major causes of delays in the nation's busiest regions are bad weather and antiquated sorting equipment.

- B. Since privatization began, the number of employees has increased by 25 percent.
- C. Over 60 percent of the postal budget goes to pay salaries.
- D. After a small post sorting facility doubled its staff, the number of delays that were reported decreased by 50 percent.
- E. Since privatization, the average length of delay in the nation's busiest regions has doubled. 5.
Employees

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is A. The conclusion that postal service must add to their staff is based on an assumption that the problem lies in that area. Choice A indicates that the delay were due to two other factors bad weather and old equipment, therefore hiring additional staff is unlikely to be an effective solution.

QUESTION 108

Employees that get a thorough medical examination twice a year take fewer sick days. Even employees who get examined only once a year take less sick time than those who do not get checked. Therefore, if companies instituted in-house medical examination programs, the absentee rate in those companies would decrease significantly.

Which of the following, if true, most seriously weakens the argument above?

- A. Employees who get medical check ups during working hours occasionally feel ill for short periods of time after the examination.
- B. Employees who are frequently absent are the least likely to cooperate with a corporate medical program.
- C. Employees who get a thorough medical examination once a week in their company's medical program usually also get checked by their private doctor.
- D. Employees who get examined in their company's in-house medical program use their working time no more productively than those who do not get examined. Employees who get medical examinations during working hours take slightly longer lunch breaks than employees who do not get examinations.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. The argument states that absenteeism would decrease if an in-house medical program were instituted. However, if those employees who are most frequently absent are least likely to get examined, then the program is unlikely to solve the problem of absenteeism

QUESTION 109

In an attempt to discourage the widespread acceptance of clothing manufactured in sweatshops, the council of a small town plans to ban the sale of sweatshop goods for which substitutes manufactured under humane conditions exist. The council argues that non-sweatshop apparel is morally preferable. Which of the following, if true, indicates that the plan to ban the sale of sweatshop goods is ill suited to the town council's moral objectives?

- A. Although clothing manufactured in sweatshops is now available, members of the town council believe non-sweatshop apparel is better for workers in the clothing manufacturing business.
- B. The clothing factory at which most of the townspeople are employed plans to improve their working conditions.
- C. After other towns enacted similar bans on the sale of clothing manufactured in sweatshops, the benefits to workers in the clothing manufacturing business were not discernible for several years.
- D. Since most townspeople prefer clothing manufactured in sweatshops in many instances, they are likely to purchase them in neighboring towns where such goods are available for sale.
- E. Sweatshops sometimes produce items other than apparel.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. If the town's residents are likely to purchase the same items from another town, then the town council's objectives of limiting purchases of sweatshop manufactured clothing will not be met.

QUESTION 110

Holden's Ltd. two subsidiaries performed with remarkable consistency over the past five years: in each of those years, Lexton has accounted for roughly 30 percent of dollar sales and 60 percent of profits, and Still more for the balance.

Which of the following can properly be inferred regarding the past five years from the statement above?

- A. Total dollar sales for each of the subsidiaries have remained roughly constant.
- B. Lexton has faced stiffer competition in its markets than has Still more.
- C. Stillmore has realized lower profits per dollar of sales than has Lexton.
- D. The product mix offered by each of the company's divisions has remained unchanged.
- E. Highly profitable products accounted for a higher percentage of Stillmore's sales than of those of Lexton.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is C. If Lexton has accounted for roughly 30 percent of dollar sales and 60 percent of profits, then it has realized more profit per dollar of sales than Stillmore. There are not enough facts to support the inferences reached in the other answers.

QUESTION 111

Shereen cosmetics sometimes discount the price of its premium eye shadows to retailers for a promotion period when the product is advertised to consumers. Such promotions often result in a dramatic increase in amount of premium eye shadows sold by the manufacturers to retailers. Nevertheless, the manufacturers could often make more profit by not holding the promotions. Which of the following, if true, most strongly supports the claim above about the manufacturers' profit?

- A. The amount of discount generally offered by manufacturers to retailers is carefully calculated to represent the minimum needed to draw consumers' attention to the eye shadows.
- B. For many consumer products the period of advertising discounted prices to consumers is about a week, not sufficiently long for consumers to become used to the sale price.
- C. For cosmetics that are not newly introduced, the purpose of such promotions is to keep the products in the minds of consumers and to attract consumers who are currently using competing products.
- D. During such a promotion retailers tend to accumulate in their warehouses inventory bought at discount; they then sell much of it later at their regular price.
- E. If a manufacturer fails to offer such promotions but its competitor offers them, that competitor will tend to attract consumers away from the manufacturer's product.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. According to choice D, the promotion does not bring about increased sales to the consumer, but a hoarding of the product by the retailer. Without the promotion, retailers would eventually buy the same numbers of the product at its fullprice, therefore, choice D supports the claim.

QUESTION 112

New home buyers are all financially protected against bankruptcy of the contractor because of a law requiring the contractor to get bank backing to insure all individual investments. An economist argues that this insurance is partly responsible for the high rate of bankruptcies among contractors, since it removes from buyers any financial incentive to find out the financial status of the contractor they are hiring. If buyers were more selective, then contractors would need to be secure in order to compete for buyers.

The economist's argument makes which of the following assumptions?

- A. Bankruptcy is caused when contractors default on loan repayments to their banks.
- B. A significant proportion of contractors use the services of sub-contractors to do the bulk of the work.
- C. The more a homebuyer has to invest in a house he or she is building, the more careful he or she tends to be in selecting a contractor.

- D. The difference in the payment schedules to contractors is not a significant factor in bankruptcies.
- E. People looking for a contractor to build their houses are able to determine which contractors are secure against bankruptcy.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is E. The economist's assumption is that what he is proposing can be implemented. If those people looking for a contractor are unable to determine which ones are secure against bankruptcy, then buyers do not have the option of being more selective in their choice of contractor.

QUESTION 113

Which of the following, if true, most seriously weakens the economist's argument?

- A. Before the law requiring the contractor to get bank backing to insure all individual investments was passed, there was a lower rate of bankruptcy than there is now.
- B. When the law did not insure buyers against the bankruptcies of building contractors, frequent bankruptcies occurred as result of depositors' fears of investing money in a newly built house.
- C. Surveys show that a significant proportion of new home buyers are aware that their investments are protected by law.
- D. There is an upper limit on the amount of an individual's investment for which a contractor is required by law to get bank backing, but very few individuals' investments exceed this limit.
- E. The security of a contractor against bankruptcy depends on the percentage of its assets reinvested into the business.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. The argument that bank backing is partially responsible for the high rate of bank failures would be weakened if the bank backing to insure all individual investments also prevented certain contractor bankruptcies. Choice B suggests that it does prevent some bankruptcies and is thus the best answer.

QUESTION 114

Between 1990 and 1998, occupancy in Branson Hospital averaged 79 percent of capacity, while admission rates remained constant, at an average of 9 admissions per 100 beds per year. Between 1998 and 2002, however, occupancy rates increased to an average of 85 percent of capacity, while admission rates declined to 8 per 100 beds per year.

Which of the following conclusions can be most properly drawn from the info given above?

- A. The average stay for Branson Hospital residents rose between 1998 and 2002.
- B. The proportion of children staying in Branson hospital was greater in 2002 than in 1990.
- C. Hospital admission rates tend to decline whenever occupancy rates rise.
- D. Hospitals built prior to 1998 generally had fewer beds than did hospitals built between 1998 and 2002.
- E. The more beds a nursing home has, the higher its occupancy rate is likely to be.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is A. Choice A receives support from the fact stated above: between 1998 and 2002, Branson hospital occupancy rates rose though admission rates decline

QUESTION 115

American customers expect high quality. When the quality of a manufactured product is raised, it in turn raises customer expectations. A company that believes that the quality of its products is satisfactory will soon discover that its customers are not similarly satisfied. The goal of Sunnybrook Corporation is to meet or exceed customer expectations.

Which of the following must be true on the basis of the statements above?

- A. Sunnybrook's competitors will succeed in attracting customers only if those competitors adopt Sunnybrook's goal as their own.
- B. A company that does not correctly forecast the expectations of its customers is certain to fail in advancing the quality of its products.
- C. It is possible to meet the goal of Sunnybrook Corporation only if the quality of their products can be continually improved upon.
- D. If a company becomes satisfied with the quality of the products it manufactures, then the quality is likely to decline.
- E. Sunnybrook's customers are currently satisfied with the quality of its products.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is C. Sunnybrook wishes to meet customer expectations; however these expectations are always being raised. Whatever the quality of Sunnybrook's products, it will be possible to meet their goal only by continually improving their products.

QUESTION 116

According to a review of 38 studies of patients suffering from water retention, a large majority of the patients reported that fasting eased their suffering considerably. Yet fasting is not used to treat water retention even though the conventional medications often have serious side effects. Which of the following, if true, best explains the fact that fasting is not used as a treatment for water retention?

- A. For a small percentage of patients with water retention, fasting induces a temporary sense of nausea
- B. Getting patients with water retention to fast regularly is more difficult than getting healthy patients to do so.
- C. Fasting regularly over a long period of time can lead to temporary impairment of balance comparable to that induced by consuming several ounces of alcohol.
- D. The dramatic shifts in water retention connected with fasting have not been traced to particular changes in brain chemistry.
- E. The water retention returns in full force as soon as the fast is broken by even a small meal.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is A. In choice A, the words object and necessity, both singular, agree.

QUESTION 117

The more frequently employees that take a break for guided relaxation exercises during working hours each week, the fewer sick days they take. Even workers who take a guided relaxation break once a week during working hours take less sick leave than those who do not perform relaxation. Therefore, if companies started guided relaxation programs, the absentee rate in those companies would decrease significantly. Which of the following, if true, most seriously weakens the argument above?

- A. Employees who do guided relaxation exercises during working hours occasionally fall asleep for short periods of time after the exercises.
- B. Employees who are frequently absent are the least likely to cooperate with or to join a corporate relaxation program.
- C. Employees who do guided relaxation exercises only once a week in their company's fitness program usually also do relaxation exercises at home.
- D. Employees who do guided relaxation exercises in their company's relaxation program use their working time no more productively than those who do not do relaxation exercises.
- E. Employees do guided relaxation exercises during working hours take slightly longer lunch breaks than employees who do not do relaxation exercise

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is C. The passage challenges the validity of the theory that positively biased self-perception is closely correlated with normal human

thought and good mental health by showing how a very high self-perception may lead to violent behavior.

QUESTION 118

Home insurance premiums are typically set after an appraiser assigns an official assessed value. Reassessments should be frequent in order to remove distortions that arise when property value changes at differential rates. In actual fact, however, properties are reassessed only when they stand to benefit the insurance company. In other words, a reassessment takes place when the most likely outcome is an increase in insurance premiums to the homeowner.

Which of the following, if true, describes a situation in which a reassessment should occur but is unlikely to do so?

- A. Property values have risen sharply and uniformly.
- B. Property values have risen everywhere, some very sharply, some moderately.
- C. Property values have on the whole risen sharply; yet some have dropped slightly.
- D. Property values have on the whole dropped significantly; yet some have risen slightly.
- E. Property values have dropped significantly and uniformly.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. Choice d correctly uses the not only... but also... construction, with parallel phrases.

QUESTION 119

Although perioral dermatitis rashes are believed to be caused by reactions to Sodium Laurel Sulfate (SLS) found in shampoos and other personal care products, instructing patients to eliminate all products with SLS frequently does not stop the perioral dermatitis. Obviously, some other cause of perioral dermatitis besides reactions to SLS must exist.

Which of the following, if true, would most seriously weaken the conclusion above?

- A. Many personal care products elicit an allergic skin response only after several days, making it very difficult to observe links between specific products patients use and the perioral dermatitis they develop.
- B. Skin allergies affect many people who never develop the symptom of perioral dermatitis.
- C. Many patients report that the personal care products that cause them perioral dermatitis are among the products they most enjoy using.
- D. Very few patients have allergic skin reactions as children and then live rash-free adult lives once they have eliminated products to which they have been demonstrated to be allergic.
- E. Very rarely do personal care products cause patients to suffer a symptom more severe than that of perioral dermatitis rashes.

Correct Answer: B

Section: Critical Reasoning Questions**Explanation****Explanation/Reference:**

Explanation:

The best answer is B. The effect of lowering wages is to reduce quality sufficiently to reduce sales. This is a good reason to doubt that wage cuts would give Johnson any competitive edge.

QUESTION 120

In prenatal testing for spina bifida, a life threatening disease, a false positive result indicates that an fetus has spina bifida when, in fact, it does not; a false negative result indicates that a fetus does not have spina bifida when, in fact, it does. To detect spina bifida most accurately, physicians should use the laboratory test that has the lowest proportion of false positive results.

Which of the following, if true, gives the most support to the recommendation above?

- A. All laboratory tests to detect spina bifida have the same proportion of false negative results.
- B. The laboratory test that has the lowest proportions of false positive results causes the same minor side effects as do the other laboratory tests used to detect spina bifida.
- C. In treating spina bifida patients, it is essential to begin treatment as early as possible, since even a week of delay can result in loss of life.
- D. The proportion of inconclusive test results is equal for all laboratory tests used to detect spina bifida.
- E. The accepted treatment for spina bifida does not have damaging side effects

Correct Answer: B

Section: Critical Reasoning Questions**Explanation****Explanation/Reference:**

Explanation:

The best answer is B. The effect of lowering wages is to reduce quality sufficiently to reduce sales. This is a good reason to doubt that wage cuts would give Johnson any competitive edge.

40. The best answer is C. If professional artists, the only customers interested in innovation, created a strong demand for innovations for purposes other than what is officially recognized as a standard medium for purposes of artistic creations, then the conclusion would not follow. Therefore, choice C, which states that professional artists generate no such demand is assumed and is the best answer..

QUESTION 121

Health club membership has increased dramatically over the last five years. In order to take advantage of this increase, Fitness Express plans to open more of the same types of classes available during the week, while continuing its already very extensive advertising in newspapers and on the radio. Which of the following, if true, provides most support for the view that Fitness Express cannot increase membership to its gyms by adopting the plan outlined above?

- A. Although it fills all of the classes it opens, Fitness Express's share of all health club memberships has declined over the last five years.
- B. Fitness Express' number of classes offered to their clients has declined slightly over the last year.
- C. Advertising has made the name of Fitness Express widely known, but few customers know that Fitness Express health clubs also offer acupuncture and shiatsu treatments.
- D. Fitness Express's health clubs is one of three clubs that have together accounted for 88% of health club memberships.
- E. Despite a slight decline in membership price, sales of Fitness Express memberships have fallen in the last five years.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. By stimulating T-cells and inhibiting the growth of certain viruses, rashes can aid the body in fighting infection. However, Binofram can eliminate the rash. Thus, as choice B states, Binofram can prolong a patient's illness.

QUESTION 122

In a psychological experiment conducted at South bay University, groups of men with various levels of education read stories in which people caused harm, some of them doing so intentionally, and some accidentally. When asked about appropriate penalization for those who had caused harm, the less educated men, unlike the educated ones, assigned punishments that did not vary according to whether the harm was done intentionally or accidentally. Uneducated men, then, do not regard people's intentions as relevant to penalization.

Which of the following, if true, would most seriously weaken the conclusion above?

- A. In these stories, the severity of the harm produced was clearly stated.
- B. In interpreting these stories, the listeners had to draw on a relatively feminine sense of human psychology in order to tell whether harm was produced intentionally or accidentally.
- C. Relatively uneducated men are as likely to produce harm unintentionally as are more educated men.
- D. The more educated men assigned penalization in a way that closely resembled the way women had assign penalization in a similar experiment.
- E. The less educated men assigned penalization that varied according to the severity of the harm done by the agents in the stories

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. Choice B indicates that less educated men might be unable to tell whether the harm in the stories was produced intentionally. Thus, even if less educated men do regard people's intentions as relevant, they might be unable to apply this criterion here. B, therefore, undermines the conclusion's support.

QUESTION 123

More sports journals are sold in Hornby than in Milston. Therefore, the residents of Hornby are better informed about major sporting events than are the residents of Milston. Each of the following, if true, weakens the conclusion above EXCEPT:

- A. Hornby has a larger population than Milston.
- B. Most residents of Milston work in Hornby and buy their reading material there.
- C. The average newsstand price of journals sold in Hornby is lower than the average price of journals sold in Milston.
- D. A monthly journal restricted to the coverage of local events is published in Hornby.
- E. The average resident of Hornby spends less time reading sports journals than does the average resident of Milston.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is C. The price differential noted in C might help to explain the difference in sales, but it does not undermine the conclusion based on the difference. Therefore, C is the best answer.

QUESTION 124

Which of the following, best completes the passage below?

At last month's symposium on the increasing air pollution affecting the Beaumont forest, most participating members favored uniform controls on the quality of exhaust fumes, whether or not specific environmental damage could be attributed to a particular source of fumes. What must, of course, be shown, in order to avoid excessively restrictive controls, is that _____ .

- A. any uniform controls that are adopted are likely to be implemented without delay
- B. environmental damage already inflicted on the Beaumont forest is reversible
- C. the members favoring uniform controls are those representing bodies that generate the largest quantities of exhaust fumes
- D. all of any given pollutant that is to be controlled actually reaches Beaumont forest at present
- E. any substance to be made subject to controls can actually cause environmental damage

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is E. If a subject that causes no environmental damage were subject to controls, those controls would be more restrictive than

necessary.

QUESTION 125

Although the new cochleae manufactured by Medotech will cost more than twice as much as the cochlear implants now in use, Medotech implants should still be cost-effective. Not only will surgery and recovery time be reduced, but Medotech cochlear replacements should last longer, thereby reducing the need for further hospital stays.

Which of the following must be studied in order to evaluate the argument presented above?

- A. The amount of time a patient spends in surgery versus the amount of time spent recovering from surgery.
- B. The amount by which the cost of producing Medotech cochlear replacements has declined with the introduction of the new technique for producing them.
- C. The degree to which the use of Medotech cochlear replacements is likely to reduce the need for repeat surgery when compared with the use of the replacements now in use.
- D. The degree to which the use of Medotech replacements are more carefully manufactured than are the replacements now in use,
- E. The amount by which Medotech will drop in cost as the production procedures become standardized and applicable on a larger scale.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is C. To evaluate the argument it must be determined whether these savings will compensate for the increased cost. Therefore, study of the expected reduction in the need for further hospital stays is needed.

QUESTION 126

Clarinet reeds often lose their freshness become less responsive after a few weeks of intense use. One clarinetist has hypothesized that a buildup of oil, rather than changes in the material properties of the reed, were responsible.

Which of the following investigations is most likely to yield significant information that would help to evaluate the hypothesis?

- A. Determining what kind of wood is used to make the reeds used by jazz clarinetists.
- B. Determining whether jazz clarinetists make their reeds lose their freshness faster than do classical clarinetists.
- C. Determining whether identical lengths of reeds, of the same thickness, lose their freshness at different rates when put onto various brands of clarinets.
- D. Determining whether rubbing various substances on the new reed causes them to lose their freshness.
- E. Determining whether a fresh reed and one that has lost its freshness produce different qualities of sound

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. The hypothesis has two parts: first, that intense use does not bring material changes that cause the reed to lose its freshness and, second, that oil causes the phenomenon. The experiment suggested in choice D directly test this hypothesis by contaminating strings that are known to have their original material properties.

QUESTION 127

Many people claim that advertisements of alcoholic drinks influence young people to start drinking socially. In Iceland, however, where there has been a ban on the advertisement of alcoholic beverages since 1982, drinking is at least as prevalent among young people as it is in countries that do not have a similar ban.

Which of the following statements draws the most reliable conclusion from the information above?

- A. Advertising does not play a role in causing young people to start or continue drinking.
- B. Advertisements of alcoholic drinks cannot be the only factor that affects the prevalence of drinking among young people.
- C. Banning advertisements of alcoholic drinks does not reduce the consumption of alcoholic drinks.
- D. More youths drink if they are not exposed to advertisements of alcoholic drinks than if they are.
- E. Most youths who drank in 1982 did not stop when the ban on advertisements of alcoholic drinks was implemented.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. If advertisements of alcoholic drinks were the only factor that affected young people's drinking habits, there would be a difference in the prevalence of drinking between countries that ban such advertising and those that do not. According to the passage, there is no difference, so advertisements of alcoholic drinks cannot be the only factor.

QUESTION 128

Wheat has more nutritional value than rye. But since oats have more nutritional value than rice, it follows that wheat has more nutritional value than rice. Any of the following, if introduced into the argument as an additional premise, makes the argument above logically correct EXCEPT:

- A. Wheat and oats have the same nutritional value.
- B. Rye has more nutritional value than oats.
- C. Rye has more nutritional value than rice.
- D. Rye and oats have the same nutritional value.

E. Oats have more nutritional value than wheat

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is E. The question asks for a different premise that does not make the argument logically correct. Choice A leaves open the possibility that the conclusion of the argument is false.

QUESTION 129

A famous painter has recently won a lawsuit against a major food manufacturer for commissioning a graphic designer to design the packaging of its chocolate chip cookies in the painter's distinctive style. As a result of the lawsuit, manufacturers will stop asking graphic artists to copy distinctive painting styles. Therefore, the cost of package design will rise because employing the services of known artists cost more than those of graphic designer that imitate their style.

The conclusion above is based on which of the following assumptions?

- A. Most people are unable to distinguish a famous artist's illustration from that of a good graphic artist imitating the painter's style.
- B. Manufacturers will use well-known painting styles in their packaging.
- C. The original version of some well-known paintings are unavailable for use in packaging.
- D. Manufacturers will continue to use graphic artists to imitate the artistic style of famous painters.
- E. Packaging using a famous painter's style usually sell better than packaging using the artistry of imitators.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. If choice E were not assumed, the costs of the services of the famous painters would not be said to affect packaging costs. Since packaging costs are, however, projected to rise because of the relatively high cost of famous painters' services, choice E is assumed and is the best answer.

QUESTION 130

Excavations on the now uninhabited isle of Kelton reveal a scene typical of towns decimated by volcanic ash. Archaeologists have hypothesized that the destruction was due to volcanic activity known to have occurred in the vicinity of the island in 160 B. C.

Which of the following, if true, most strongly supports the archaeologists' hypothesis?

- A. No coins minted after 160 B.C. were found in Kelton, but coins minted before that year were found in abundance.
- B. Pieces of gold and pearl jewelry that are often found in graves dating from years preceding and following 160 B.C. were also found in several graves on the island.
- C. Most modern histories of the region mention that several major volcano eruptions occurred near the island in 160 B.C.
- D. Several small jugs carved in styles popular in the region in the century between 200 B.C. and 100
- E. C. were found in Kelton.
- F. Drawings of the styles that were definitely used in the region after 160 B.C. were found in Kelton.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is A. The archeologist hypothesized that Kelton was decimated by volcanic ash in 160 B.C. Since A provides evidence that 160 B.C. was the date when life in Kelton was disrupted, A supports the hypothesis.

QUESTION 131

Many community colleges suffer declining enrollments during periods of economic recession. At government retraining programs, which are not provided free of charge, enrollment figures boom during these periods when many people have less money and there is more competition for jobs.

Each of the following, if true, helps to explain the enrollment increases in government retraining programs above EXCEPT:

- A. During periods of economic slowdown, government-retraining programs are more likely that community colleges to prepare their students for the jobs that are still available.
- B. During periods of economic prosperity, graduates of government retraining programs often continue their studies in community colleges.
- C. Tuition at most government retraining programs is a fraction of that at community colleges.
- D. Government retraining programs devote more resources than do other colleges to attracting those students especially affected by economic slowdowns.
- E. Students at government retraining programs, but not those at most community colleges, can control the cost of their studies by choosing the number of courses they take each term.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. Choice B might explain the decreased enrollment at community colleges during the slowdown, but because it deals with graduates of government retraining programs it cannot explain why enrollment at these colleges might increase

QUESTION 132

Parents of some of the children in a particular class have claimed that the teacher is not objective and favors his male students with higher grades. But the record showed that 92% of the female students received a passing grade in this teacher's class. This record demonstrates that the teacher has not discriminated against women when assigning grades.

The argument above is flawed in that it ignored the possibility that

- A. a large number of the teacher's student were in his class the previous year.
- B. many teachers find it difficult to be objective when assigning grades to male and female students.
- C. the evidence shows that more than 92% of the female students should have received a passing grade.
- D. the majority of tests written by female students and that have been rechecked by another teacher were given a higher grade by the second teacher.
- E. the teacher is biased against female students in the case of only some of the subjects he teachers.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is C. The flaw in the argument is that it assumes erroneously that a large percentage of female students who pass this teacher's class demonstrates absence of discriminatory behavior against women on the part of the teacher who gave the grade. Choice E exposes this flaw by pointing out that the judge may well have failed to pass a female student in cases where evidence shows that the student should have passed.

QUESTION 133

The number of young adults that are illiterate has dropped significantly in a certain county over the last fifteen years. Education officials attribute this decrease entirely to improved conditions in the schools, which made for a better teaching environment, reducing the level of illiteracy. Which of the following, if true, would most seriously weaken the education officials' explanation for the lower incidence of the disease?

- A. Many similar improvements in school conditions have been made over the last twenty-five years in the county.
- B. Home-schooling has not been more prevalent among the illiterate as compared to people who are not illiterate.
- C. Because of a new assessment scale, many people who until this year would have been considered illiterate are now considered low-level readers.
- D. The same percentage of the population has been tested every year for the last 30 years.
- E. The conditions in the schools were brought up to the standards of the neighboring counties twenty years ago

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is C. The education officials assume that the decrease in the number of people who are illiterate reflects a diminution in cases of illiteracy. By pointing out that this assumption is false, choice C undermines the officials' explanation.

QUESTION 134

In many hospitals, more and more monitoring is being carried out by automated equipment instead of human employees who previously carried out the work. This is done in an attempt to save hospital expenses. However, many employees who lose their jobs to automation will need government assistance to get by, and the same corporations that are laying people off will eventually pay for that assistance through increased taxes and unemployment insurance payments.

Which of the following, if true, most strengthens the author's argument?

- A. Most of the new jobs created by automated equipment pay less than the jobs that were eliminated by automated equipment did.
- B. Many hospitals that have failed to automate have seen their profits decline.
- C. Unemployment insurance and taxes are paid also by corporations that are not automating.
- D. Many workers who have already lost their jobs to automated equipment have been unable to find new employment.
- E. The initial investment in machinery for automated equipment is often greater than the short-term savings in labor costs.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. The threat envisioned by the author to the economic survival of workers displaced by automation will be serious only if they cannot find new jobs. Choice A states that there are already workers that cannot find employment, and so strengthens the author's argument.

QUESTION 135

Unlike musical talent or other creative skills, there is a disinclination on the part of many participants in the program to acknowledge the degree to which their writing talents are weak.

- A. Unlike musical talent or other creative skills, there is a disinclination on the part of many participants in the program to acknowledge the degree to which their writing talents are weak.
- B. Unlike musical talent or other creative skills, which they admit they lack, many participants in the program are disinclined to acknowledge that their writing talents are weak.
- C. Unlike musical talent or other creative skills, writing talents bring out a disinclination in many participants in the program to acknowledge that they are

weak to a degree.

- D. Many people in the program, willing to admit that they lack musical talent or other creative skills, are disinclined to acknowledge that their writing skills are weak
- E. Many people in the program have a disinclination to acknowledge the weakness of their writing talents while willing to admit their lack of musical talent or other creative skills.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. Choice A illogically compared talents to a disinclination. B compares talent to many people in the program. Choice C is awkward and unidiomatic. In E, have a disinclination... while willing is grammatically incomplete, and admit their lack should be admitting to their lack.

QUESTION 136

The Burmese ferret badger burrows its home in the ground. Based on the fact that different local populations of Burmese ferret badgers of the same species dig homes of different styles, zoologists have concluded that the badgers building styles are a culturally acquired, rather than a genetically transmitted, trait.

Which of the following, if true, would most strengthen the conclusion drawn by the zoologists?

- A. There are more common characteristics than there are differences among the Burmese ferret badger's styles of the local Burmese ferret badger population that has been studied most extensively.
- B. Young Burmese ferret badgers are inept at digging burrows and apparently spend years watching their elders before becoming accomplished in the local style.
- C. The homes of one species of badger lack the characteristics of the homes of most other species of badger.
- D. Burmese ferret badgers are found only in Burma and India, where local populations of the badgers apparently seldom have contact with one another.
- E. It is well known that the squeals of some badgers are learned rather than transmitted genetically.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. The information in choice B says that young Burmese ferret badgers progress slowly towards mastery of a burrow-digging style. This suggests that the skill is one they must learn, rather than one whose transmission is wholly genetic. Choice B also suggests a means of cultural transmission, namely, observation of older badger's techniques.

QUESTION 137

In some cities, many potters have been winning acclaim as artists. But since pottery must be useful, potters must exercise their craft with an eye to the practical utility of their product. For this reason, pottery is not an art.

Which of the following, is an assumption that supports drawing the conclusion above from the reason given for that conclusion?

- A. Some plates, bowl and vessels are made to be placed in museums where they will not be used by anyone.
- B. Some potters are more concerned than others with the practical utility of the products they produce.
- C. Potters should be more concerned with the practical utility of their products than they currently are.
- D. Artists are not concerned with the monetary value of their products.
- E. An object is not an art object if its maker pays attention to the objects' practical utility.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is E. The argument concludes that pottery is not an art because potters must consider the practical utility of their product. If it is true that an object is not a work of art if its maker pays attention to the object's practical utility, the conclusion is supported.

QUESTION 138

Activity levels of the green iguana vary in cycles that are repeated every 24 hours. It is logical to assume that alteration in the intensity of incident light is the stimulus that controls these daily biological rhythms. But there is much evidence to contradict this hypothesis.

Which of the following, if known, is evidence that contradicts the hypothesis stated above?

- A. The temperature of the green iguana varies throughout the day, with the maximum occurring in the late afternoon and the minimum in the morning.
- B. While some animals, such as the rabbit, are much more active during the day, others, such as moles, show greater activity at night.
- C. When animals are transported from one time zone to another, their daily biological rhythms adjust in a matter of days to the periods of sunlight and darkness in the new zone.
- D. Other types of iguanas display similar activity cycles even though they live in very different climates.
- E. Even when exposed to constant light intensity around the clock, some iguanas display rates of activity that are much greater during daylight hours than at night.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is E. If iguanas that are exposed to light 24 hours a day display a similar pattern of activity as those exposed to natural light and dark cycles this constitutes evidence against the hypothesis that it is the alterations in light that control biological cycles.

QUESTION 139

Researchers recently discovered that lipstick can become contaminated with bacteria that causes mononucleosis. They found that contamination usually occurs after the lipstick has been used for six months. For that reason, women should dispose of any lipstick after six months of use.

Which of the following, if true, would most weaken the conclusion above?

- A. The researchers could not discover why lipstick contamination usually occurred only after six months of use.
- B. The researchers failed to investigate contamination of lipstick by viruses, yeasts, and other pathogenic microorganisms.
- C. The researchers found that among women who used lipstick contaminated with bacteria that causes mononucleosis, the incidence of these diseases was no higher than among people who used uncontaminated lipsticks.
- D. The researchers found that people who wiped their lipsticks clean after each use were as likely to have contaminated lipsticks as were people who never wiped their lipsticks.
- E. The researchers found that, after six weeks of use, greater length of use of a lipstick did not correlate with a higher number of bacteria being present.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is C. According to choice C, using a contaminated lipstick does not increase the incidence of infection, so the recommendation to replace a lipstick before it becomes contaminated is greatly undermined.

QUESTION 140

Unlike the wholesale price of uncut diamonds, the wholesale price of other uncut gemstones has fallen considerably in the last year. Thus, although the retail price of jewelry made with gemstones other than diamonds has not yet fallen, it will inevitably fall.

Which of the following, if true, most seriously weakens the argument above?

- A. The cost of processing uncut gemstones has increased during the last year.
- B. The wholesale price of uncut diamonds is typically higher than that of the same volume of other uncut gemstones.
- C. The operating costs of the average retail jewelry store have remained constant during the last year.
- D. The cost of mining gemstones other than diamonds has increased in the last year.
- E. Changes in retail prices always lag behind changes in wholesale prices.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 141

A company has initiated a health program for its employees that enables the worker, free of charge, to receive a monthly massage treatment, consult with a dietician and attend lectures in healthy living. These programs increase worker productivity and absenteeism for employee health care. Therefore, these programs provide as much benefit to the company as they do to the employees.

Which of the following, if true, most significantly strengthens the conclusion above?

- A. Health programs are often the most popular services offered to employees.
- B. Studies have shown that such health programs are not effective for many people.
- C. Regular massage treatments and dietary counseling reduce people's risk of catching a flu or a cold and provides them with increased energy.
- D. Dizziness sometimes results from beginning a course of massage treatments.
- E. Employee assistance programs require companies to hire people to supervise the various programs offered.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is C. The conclusion is that the programs benefit both companies and employees. For companies, reducing employees' risk of flu or cold is likely to reduce absenteeism, and increasing employee energy is likely to increase worker productivity. For employees, the benefits are self-evident.

QUESTION 142

Interviewer: An alarming statistic reported in the Hobern Medical Journal is that 90 percent of the people in this country now report that they know someone who has heart disease.

Dr. Summer: But an expected level of heart disease is 5 percent, or in other words, 1 out of every 20 people. So at any given time if a person knows approximately 50 people, 1 or more will very likely suffer from heart disease.

Dr. Summer's argument is structured to lead to which of the following conclusion?

- A. The fact that 90 percent of the people know someone who suffers from heart disease is not an indication that heart disease is abnormally high.
- B. The current level of heart disease is not moderate.

- C. If at least 5 percent of the population suffered from heart disease, the result of questioning a representative group of people cannot be the percentage the interviewer cites.
- D. It is unlikely that the people whose statements the interviewer cites are giving accurate reports.
- E. If a person with heart disease is given as a certain percent, the actual percentage of those with heart disease is even higher.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is A. Dr. Summer's argument is essentially that, even if the facts are as the interviewer presents them, they are not in and of themselves a cause for alarm. Even circumstances reassuringly normal and unremarkable imply the sort of fact the interviewer cites. Thus, that fact does not indicate that the rate of heart disease has increased above normal.

QUESTION 143

Interviewer: An alarming statistic reported in the Hobern Medical Journal is that 90 percent of the people in this country now report that they know someone who has heart disease. Dr. Summer: But an expected level of heart disease is 5 percent, or in other words, 1 out of every 20 people. So at any given time if a person knows approximately 50 people, 1 or more will very likely suffer from heart disease.

Dr. Summer's argument relies on the assumption that

- A. Normal levels of heart disease are rarely exceeded
- B. Heart disease is not normally concentrated in geographically isolated segments of the population.
- C. The number of people who each know someone who suffers from heart disease is always higher than 90 percent of the population
- D. The interviewer is not consciously distorting the statistics he presents
- E. Knowledge that a personal acquaintance has heart disease generates more fear of getting heart disease than does knowledge of heart disease statistics.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. Dr. Summer's argument assumes that people are generally similar in how likely they are to have among their acquaintances people who have heart disease. Since heavy concentrations of people with heart disease in geographically isolated segments of the population would produce great differences in that respect, Dr. Summer's argument assumes few, if any, such concentrations.

QUESTION 144

The cost of manufacturing sports shoes in Macao is 25% less than the cost of manufacturing them in the Philippines. Even after transportation fees and tariff charges are added, it is still cheaper for a company to import sport shoes from Macao to the Philippines than to manufacture sports shoes in the Philippines.

The statements above, if true, best support which of the following assertions?

- A. Labor costs in Macao are 25% below those in the Philippines.
- B. Importing sports shoes from Macao to the Philippines will eliminate 25% of the manufacturing jobs in the Philippines.
- C. The tariff on sports shoes imported from Macao to the Philippines is less than 25% of the cost of manufacturing sports shoes in the Philippines.
- D. The fee for transporting a pair of sports shoes from Macao to the Philippines is more than 25% of cost of manufacturing the shoes in Macao.
- E. It takes 25% less time to manufacture a pair of sports shoes in Macao than it does in the Philippines.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is C. If the tariff on importing sport shoes from Macao to the Philippines were as high as 25% or more of the cost of producing sports shoes in the Philippines, then, contrary to what the passage says, the cost of importing sports shoes would be equal to or more than the cost of producing sports shoes in the Philippines. Thus, the tariff cannot be that high

QUESTION 145

Opponents of laws that require motorcycle riders to wear helmets argue that in a free society people have the right to take risks as long as the people do not harm others as a result of taking the risks. As a result, they conclude that it should be each person's decision whether or not to wear a helmet.

Which of the following, if true, seriously weakens the conclusion drawn above?

- A. Many new motorcycles are built with safety features that made them less likely to be involved in an accident.
- B. Motorcycle insurance rates for all motorcycle owners are higher because of the need to pay for the increased injuries or deaths of people not wearing helmets.
- C. Participants in certain extreme sports are required to wear helmets.
- D. The rate of automobile fatalities in states that do not have mandatory helmet laws is greater than the rate of fatalities in states that do have such laws.
- E. In motorcycle accidents, a greater number of passengers who do not wear helmets are injured than are passengers who do wear helmets.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The principle that people are entitled to risk injury provided they do not thereby harm others fails to justify the individual's right to decide not to wear a helmet if it can be shown that it does harm others by raising insurance rates.

QUESTION 146

A drug that is highly effective in treating certain types of cancerous growth can, at present, be obtained only from the cartilage of a particular sub-species of shark, a sub-species which is quite rare in the wild. One must kill 50 sharks to make one pound of the drug. It follows, therefore, that continued production of the drug must inevitably lead to the extinction of this sub-species of shark.

Which of the following, if true, most seriously weakens the argument above?

- A. The drug made from the shark cartilage is dispensed to doctors from a central authority.
- B. The drug made from the shark cartilage is expensive to produce.
- C. Other organs of the shark can be utilized to produce different drugs.
- D. The sub-species of shark will reproduce in captivity under the proper conditions.
- E. This sub-species of shark generally lives in largely inaccessible waters.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. If the shark can be successfully bred in captivity, it is possible to continue production of the drug without threatening the shark with extinction.

QUESTION 147

Harper's Pencils manufactures and sells the same pencils as Johnson's Supply. Employee wages account for forty percent of the cost of manufacturing pencils at both factories. Harper's is seeking a competitive edge over Johnson's supply. Therefore, to promote this end, Harper's should lower employee wages.

Which of the following, if true, seriously weakens the argument above?

- A. Because they make a small number of specialty artist's pencils, pencil manufacturers cannot receive volume discounts on raw materials.
- B. Lowering wages would reduce the quality of employee work and this reduced quality would lead to lowered sales.
- C. Harper's Pencils has taken away twenty percent of Johnson's Supply business over the last year.
- D. Johnson's Supply pays its employees, on average, ten percent more than does Harper's Pencils.

E. Many people who work for manufacturing plants live in areas in which the manufacturing plant they work for is the only industry.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. The effect of lowering wages is to reduce quality sufficiently to reduce sales. This is a good reason to doubt that wage cuts would give Johnson any competitive edge.

QUESTION 148

The technological conservatism of art supply manufacturers is a reflection of the kinds of demands they are trying to meet. The only customers who are seriously interested in purchasing new products are professional artists. Therefore, innovation in art supply technology is limited by what art critics and gallery owners accept as a proper medium of expression for artists.

Which of the following is an assumption made in drawing the conclusion above?

- A. The market for cheap traditional art supplies cannot expand unless the market for new art products expands.
- B. New art products are likely to be improved more as a result of technological innovations developed in small workshops than as a result of technical innovations developed in major manufacturing concerns.
- C. Professional artists do not generate a strong demand for innovations that fall outside what is officially recognized as a standard medium for purposes of artistic creations.
- D. The technological conservatism of art supply manufacturers results primarily from their desire to manufacture a product that can be sold without being altered to suit different national markets.
- E. The critics and gallery owners who set standards for high-quality art do not keep themselves informed about innovations in art supplies.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

If professional artists, the only customers interested in innovation, created a strong demand for innovations for purposes other than what is officially recognized as a standard medium for purposes of artistic creations, then the conclusion would not follow. Therefore, choice C, which states that professional artists generate no such demand is assumed and is the best answer.

QUESTION 149

Although Binofram has been proven to alleviate certain skin rashes associated with some medical conditions, many physicians no longer routinely prescribe this drug for this purpose. A rash can stimulate the activity of the body's T-cells and also inhibit growth of some strains of virus. If the

statements above are true, which of the following conclusion is most strongly supported by them?

- A. Binofram, an effective rash medication, alleviates the itching and discomfort of many illnesses.
- B. Binofram can prolong a patient's illness by eliminating certain skin rashes which can be helpful in fighting some diseases.
- C. Binofram inhibits the growth of the body's T-cells, which are necessary for fighting some illnesses.
- D. The more T-cells a patient's body produces, the less severe the patient's illness will be.
- E. The focus of modern medicine is on inhibiting the growth of harmful viruses within the body

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Explanation:

By stimulating T-cells and inhibiting the growth of certain viruses, rashes can aid the body in fighting infection. However, Binofram can eliminate the rash. Thus, as choice B states, Binofram can prolong a patient's illness.

QUESTION 150

Mr. Janeck: I don't believe Stevenson will win the election for governor. Few voters are willing to elect a businessman with no political experience to such a responsible public office. Ms. Siuzdak: You're wrong. The experience of running a major corporation is a valuable preparation for the task of running a state government.

- A. Siuzdak's response shows that she has interpreted Mr. Janeck's remark to imply which of the following?
- B. Mr. Janeck considers Stevenson unqualified for the office of governor.
- C. No candidate without political experience has ever been elected governor of a state.
- D. Mr. Janeck believes that political leadership and business leadership are closely analogous.
- E. A career spent in the pursuit of profit can be an impediment to one's ability to run a state government fairly.
- F. Voters generally overestimate the value of political experience when selecting a candidate.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 151

Which of the following best completes the passage below? One tax-reform proposal that has gained increasing support in recent years is the flat tax, which would impose a uniform tax rate on incomes at every level. Opponents of the flat tax say that a progressive tax system, which levies a higher rate

of taxes on higher-income taxpayers, is fairer, placing the greater burden on those better able to bear it. However, the present crazy quilt of tax deductions, exemptions, credits, and loopholes benefits primarily the high-income taxpayer, who is consequently able to reduce his or her effective tax rate, often to a level below that paid by the lower-income taxpayer. Therefore, _____

- A. higher-income taxpayers are likely to lend their support to the flat-tax proposal now being considered by Congress
- B. a flat-tax system that allowed no deductions or exemptions would substantially increase actual government revenues
- C. the lower-income taxpayer might well be penalized by the institution of a flat-tax system in this country
- D. the progressive nature of our present tax system is more illusory than real
- E. the flat tax would actually be fairer to the lower-income taxpayer than any progressive tax system could be

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 152

As part of our program to halt the influx of illegal immigrants, the administration is proposing the creation of a national identity card. The card would be available only to U.S. citizens and to registered aliens, and all persons would be required to produce the card before they could be given a job. Of course, such a system holds the potential, however slight, for the abuse of civil liberties. Therefore, all personal information gathered through this system would be held strictly confidential, to be released only by authorized personnel under appropriate circumstances. Those who are in compliance with U.S. laws would have nothing to fear from the identity card system. In evaluating the above proposal, a person concerned about the misuse of confidential information would be most interested in having the author clarify the meaning of which of the following phrases?

- A. "all persons" (line 5)
- B. "however slight" (line 7)
- C. "civil liberties" (line 8)
- D. "appropriate circumstances" (line 11)
- E. "U.S. laws" (line 2)

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 153

At one time, European and Japanese companies tried to imitate their American rivals. Today, American appliance manufacturers import European scientists to lead their research staffs; American automakers design cars that mimic the styling of German, Italian, and French imports; and American

electronics firms boast in their advertising of "Japanese-style" devotion to quality and reliability. In the world of high technology, America has lost the battle for international prestige.

Each of the following statements, if true, would help to support the claim above EXCEPT:

- A. An American camera company claims in its promotional literature to produce cameras "as fine as the best Swiss imports."
- B. An American maker of stereo components designs its products to resemble those of a popular Japanese firm.
- C. An American manufacturer of video games uses a brand name chosen because it sounds like a Japanese word.
- D. An American maker of televisions studies German-made televisions in order to adopt German manufacturing techniques.
- E. An American maker of frozen foods advertises its dinners as "Real European-style entrees prepared by fine French and Italian chefs."

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 154

Johnson is on firm ground when he asserts that the early editors of Dickinson's poetry often distorted her intentions. Yet Johnson's own, more faithful, text is still guilty of its own forms of distortion. To standardize Dickinson's often indecipherable handwritten punctuation by the use of the dash is to render permanent a casual mode of poetic phrasing that Dickinson surely never expected to see in print. It implies that Dickinson chose the dash as her typical mark of punctuation when, in fact, she apparently never made any definitive choice at all.

Which of the following best summarizes the author's main point?

- A. Although Johnson is right in criticizing Dickinson's early editors for their distortion of her work, his own text is guilty of equally serious distortions.
- B. Johnson's use of the dash in his text of Dickinson's poetry misleads readers about the poet's intentions.
- C. Because Dickinson never expected her poetry to be published, virtually any attempt at editing it must run counter to her intentions.
- D. Although Johnson's attempt to produce a more faithful text of Dickinson's poetry is well-meaning, his study of the material lacks sufficient thoroughness.
- E. Dickinson's editors, including Johnson, have failed to deal adequately with the problem of deciphering Dickinson's handwritten manuscripts.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 155

A law requiring companies to offer employees unpaid time off to care for their children will harm the economic competitiveness of our nation's businesses. Companies must be free to set their own employment policies without mandated parental-leave regulations. Which of the following, if true, would most seriously weaken the conclusion of the argument above?

- A. A parental-leave law will serve to strengthen the family as a social institution in this country.
- B. Many businesses in this country already offer employees some form of parental leave.
- C. Some of the countries with the most economically competitive businesses have strong parental-leave regulations.
- D. Only companies with one hundred or more employees would be subject to the proposed parental-leave law.
- E. In most polls, a majority of citizens say they favor passage of a parental-leave law.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 156

If A, then B.

If B, then C.

If C, then D.

If all of the statements above are true, which of the following must also be true?

- A. If D, then A.
- B. If not B, then not C.
- C. If not D, then not A.
- D. If D, then E.
- E. If not A, then not D.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 157

Dear Applicant:

Thank you for your application. Unfortunately, we are unable to offer you a position in our local government office for the summer. As you know, funding for summer jobs is limited, and it is impossible for us to offer jobs to all those who want them. Consequently, we are forced to reject many highly

qualified applicants.

Which of the following can be inferred from the letter?

- A. The number of applicants for summer jobs in the government office exceeded the number of summer jobs available.
- B. The applicant who received the letter was considered highly qualified.
- C. Very little funding was available for summer jobs in the government office.
- D. The application of the person who received the letter was considered carefully before being rejected.
- E. Most of those who applied for summer jobs were considered qualified for the available positions.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 158

Studies of fatal automobile accidents reveal that, in the majority of cases in which one occupant of an automobile is killed while another survives, it is the passenger, not the driver, who is killed. It is ironic that the innocent passenger should suffer for the driver's carelessness, while the driver often suffers only minor injuries or none at all.

Which of the following is an assumption underlying the reasoning in the passage above?

- A. In most fatal automobile accidents, the driver of a car in which an occupant is killed is at fault.
- B. Drivers of automobiles are rarely killed in auto accidents.
- C. Most deaths in fatal automobile accidents are suffered by occupants of cars rather than by pedestrians.
- D. Auto safety experts should increase their efforts to provide protection for those in the passenger seats of automobiles.
- E. Automobile passengers sometimes play a contributing role in causing auto accidents.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 159

As one who has always believed that truth is our nation's surest weapon in the propaganda war against our foes, I am distressed by reports of "disinformation" campaigns by American intelligence agents in Western Europe. In a disinformation campaign, untruths are disseminated through gullible local journalists in order to damage the interests of our enemies and protect our own. Those who defend this practice say that lying is necessary to counter Soviet disinformation campaigns aimed at damaging America's political interests. These apologists contend that one must fight fire with fire. I

would point out to the apologists that the fire department finds water more effective. The author of the passage above bases his conclusion on which of the following?

- A. A circular definition of "disinformation"
- B. An example of the ineffectiveness of lying as a weapon in the propaganda war
- C. An analogy between truth and water
- D. An appeal to the authority of the fire department
- E. An attack on the character of American intelligence agents in Western Europe

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 160

As one who has always believed that truth is our nation's surest weapon in the propaganda war against our foes, I am distressed by reports of "disinformation" campaigns by American intelligence agents in Western Europe. In a disinformation campaign, untruths are disseminated through gullible local journalists in order to damage the interests of our enemies and protect our own. Those who defend this practice say that lying is necessary to counter Soviet disinformation campaigns aimed at damaging America's political interests. These apologists contend that one must fight fire with fire. I would point out to the apologists that the fire department finds water more effective. The author's main point is that

- A. although disinformation campaigns may be effective, they are unacceptable on ethical grounds
- B. America's moral standing in the world depends on its adherence to the truth
- C. the temporary political gains produced by disinformation campaigns generally give way to long-term losses
- D. Soviet disinformation campaigns have done little to damage America's standing in Europe
- E. disinformation campaigns do not effectively serve the political interests of the United States

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 161

Are you still reading the other newspaper in town? Did you know that the Daily Bugle is owned by an out-of-town business syndicate that couldn't care less about the people of Gotham City? Read the Daily Clarion, the only real voice of the people of Gotham City! Which of the following most directly refutes the argument raised in the advertisement above?

- A. Over half of the advertising revenues of the Daily Clarion come from firms whose headquarters are located outside of Gotham City.
- B. The Daily Clarion usually devotes more of its pages to out-of-town news than does the Daily Bugle.
- C. Nearly 40 percent of the readers of the Daily Clarion reside outside the limits of Gotham City.
- D. The editor-in-chief and all the other members of the editorial staff of the Daily Bugle have lived and worked in Gotham City for ten years or more.
- E. The Daily Bugle has been published in Gotham City for a longer time than has the Daily Clarion.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 162

The earth's resources are being depleted much too fast. To correct this, the United States must keep its resource consumption at present levels for many years to come.

The argument above depends on which of the following assumptions?

- A. Per capita resource consumption in the United States is at an all-time high.
- B. The United States wastes resources.
- C. The United States uses more resources than any other country.
- D. The United States imports most of the resources it uses.
- E. Curbing U.S. resource consumption will significantly retard world resource depletion.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 163

The earth's resources are being depleted much too fast. To correct this, the United States must keep its resource consumption at present levels for many years to come. Which of the following, if true, would most strengthen the argument above?

- A. New resource deposits are constantly being discovered.
- B. The United States consumes one-third of all resources used in the world.
- C. Other countries need economic development more than the United States does.
- D. Other countries have agreed to hold their resource consumption at present levels.

E. The United States has been conserving resources for several years.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 164

Alba: I don't intend to vote for Senator Frank in the next election. She is not a strong supporter of the war against crime.

Tam: But Senator Frank sponsored the latest anticrime law passed by the Senate. Alba: If Senator Frank sponsored it, it can't be a very strong anticrime law. Which of the following identifies the most serious logical flaw in Alba's reasoning?

- A. The facts she presents do not support her conclusion that Senator Frank is soft on crime.
- B. She assumes without proof that crime is the most important issue in the upcoming election.
- C. She argues in a circle, using an unsupported assertion to dismiss conflicting evidence.
- D. She attacks Senator Frank on personal grounds rather than on his merit as a political leader.
- E. In deciding not to vote for Senator Frank, she fails to consider issues other than crime.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 165

Which of the following best completes the passage below? the most serious flaw in television's coverage of election campaigns is its tendency to focus on the horse-race side of politics--that is, to concentrate on the question "Who's winning?" at the expense of substantive coverage of the issues and the candidates' positions on them. The endless interviews with campaign managers, discussions of campaign strategies, and, especially, the obsession with opinion polls have surrounded elections with the atmosphere of a football game or a prizefight. To reform this situation, a first step might well be_____

- A. a shortening of the length of election campaigns to a period of six weeks
- B. a stringent limit on campaign spending
- C. a reduction in the television coverage of opinion polls during election campaigns
- D. the publication and distribution of voter-education literature to inform the public about each candidate's position on the major issues
- E. a limit on the length and number of political advertisements broadcast on television

Correct Answer: C

Section: Critical Reasoning Questions
Explanation

Explanation/Reference:

QUESTION 166

With Proposition 13, if you bought your house 11 years ago for \$75,000, your property tax would be approximately \$914 a year (1 percent of \$75,000 increased by 2 percent each year for 11 years); and if your neighbor bought an identical house next door to you for \$200,000 this year, his tax would be \$2,000 (1 percent of \$200,000). Without Proposition 13, both you and your neighbor would pay \$6,000 a year in property taxes (3 percent of \$200,000).

Which of the following is the conclusion for which the author most likely is arguing in the passage above?

- A. Proposition 13 is unconstitutional because it imposes an unequal tax on properties of equal value.
- B. If Proposition 13 is repealed, every homeowner is likely to experience a substantial increase in property taxes.
- C. By preventing inflation from driving up property values, Proposition 13 has saved homeowners thousands of dollars in property taxes.
- D. If Proposition 13 is not repealed, identical properties will continue to be taxed at different rates.
- E. Proposition 13 has benefited some homeowners more than others.

Correct Answer: B

Section: Critical Reasoning Questions
Explanation

Explanation/Reference:

QUESTION 167

At an enormous research cost, a leading chemical company has developed a manufacturing process for converting wood fibers into a plastic. According to the company, this new plastic can be used for, among other things, the hulls of small sailboats. But what does the company think sailboat hulls used to be made of? Surely the mania for high technology can scarcely go further than this. The author's opinion of the manufacturing process described in the passage is based primarily on the fact that

- A. plastic is unlikely to be durable enough for high-quality sailboat hulls
- B. the research costs of developing the process outweigh any savings possible from the use of the plastic
- C. a small sailboat is not normally regarded as a high-tech product
- D. hulls for small sailboats can be made from wood without converting it into plastic
- E. many other spheres of human activity are in far greater need of technological research

Correct Answer: D

Section: Critical Reasoning Questions
Explanation

Explanation/Reference:**QUESTION 168**

At an enormous research cost, a leading chemical company has developed a manufacturing process for converting wood fibers into a plastic. According to the company, this new plastic can be used for, among other things, the hulls of small sailboats. But what does the company think sailboat hulls used to be made of? Surely the mania for high technology can scarcely go further than this.

Which of the following, if true, would most seriously weaken the author's conclusion?

- A. The plastic produced by the process is considerably lighter, stronger, and more watertight than wood.
- B. The wood used in producing the plastic is itself in increasingly short supply.
- C. The cost of the manufacturing process of the plastic increases the cost of producing a sailboat hull by 10 to 15 percent.
- D. Much of the cost of the research that developed the new process will be written off for tax purposes by the chemical company.
- E. The development of the new plastic is expected to help make the chemical company an important supplier of boat-building materials.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:**QUESTION 169**

A young man eager to become a master swordsman journeyed to the home of the greatest teacher of swordsmanship in the kingdom. He asked the teacher, "How quickly can you teach me to be a master swordsman?" The old teacher replied, "It will take ten years." Unsatisfied, the young man asked, "What if I am willing to work night and day, every day of the year?" the teacher replied, "In that case, it will take twenty years." The teacher's main point is that an important quality of a master swordsman is

- A. humility
- B. willingness to work hard
- C. respect for one's elders
- D. patience
- E. determination

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 170

Below is an excerpt from a letter that was sent by the chairman of a corporation to the stockholders. A number of charges have been raised against me, some serious, some trivial. Individuals seeking to control the corporation for their own purposes have demanded my resignation. Remember that no court of law in any state has found me guilty of any criminal offense whatsoever. In the American tradition, as you know, an individual is considered innocent until proven guilty. Furthermore, as the corporation's unbroken six-year record of growth will show, my conduct of my official duties as chairman has only helped enhance the success of the corporation, and so benefited every stockholder. Which of the following can be properly inferred from the excerpt?

- A. The chairman believes that all those who have demanded his resignation are motivated by desire to control the corporation for their own purposes.
- B. Any misdeeds that the chairman may have committed were motivated by his desire to enhance the success of the corporation.
- C. The chairman is innocent of any criminal offense.
- D. The corporation has expanded steadily over the past six years.
- E. Any legal proceedings against the chairman have resulted in his acquittal.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 171

In the years since the city of London imposed strict air-pollution regulations on local industry, the number of bird species seen in and around London has increased dramatically. Similar air-pollution rules should be imposed in other major cities. Each of the following is an assumption made in the argument above EXCEPT:

- A. In most major cities, air-pollution problems are caused almost entirely by local industry.
- B. Air-pollution regulations on industry have a significant impact on the quality of the air.
- C. The air-pollution problems of other major cities are basically similar to those once suffered by London.
- D. An increase in the number of bird species in and around a city is desirable.
- E. The increased sightings of bird species in and around London reflect an actual increase in the number of species in the area.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 172

Which of the following best completes the passage below?

In opposing government regulation of business, conservatives often appeal to the Jeffersonian ideal of limited government, expressing the wish that government would "get off the backs of the American people." Yet, paradoxically, many of these same conservatives address questions of private morality, such as those dealing with sexual behavior, by calling for_____

- A. a return to the restrictive sexual morality of the Victorian era
- B. a strengthening of the role of the family in setting moral norms for society
- C. a limitation on the amount of sexually provocative material appearing in books, movies, and television shows
- D. greater freedom for individuals to choose their own way of handling sexual issues
- E. an increased governmental role in the regulation and control of private sexual behavior

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 173

In an experiment, two different types of recorded music were played for neonates in adjacent nurseries in a hospital. In nursery A, classical music was played; in nursery B, rock music was played. After two weeks, it was found that the babies in nursery A cried less, suffered fewer minor ailments, and gained more weight than did the babies in nursery B.

In evaluating the validity of the conclusion suggested by the experiment above, it would be most important to know which of the following?

- A. The musical preferences of the parents of the two groups of newborns
- B. Whether the newborns in both nurseries were equally healthy and happy at the start of the experiment
- C. Whether loud rock music can damage the hearing of newborns
- D. What the average weight of the neonates was before and after the experiment
- E. Whether the music was played in the nurseries at all times or only at certain times

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 174

In an experiment, two different types of recorded music were played for neonates in adjacent nurseries in a hospital. In nursery A, classical music was played; in nursery B, rock music was played. After two weeks, it was found that the babies in nursery A cried less, suffered fewer minor ailments, and gained more weight than did the babies in nursery B.

Which of the following additional experimental data would support the hypothesis that classical music is beneficial to the development of newborn?

- A. The neonates in a nursery where no music was played fared better than those in nursery B.
- B. Nursery A contained 15 percent more premature babies than nursery B.
- C. The newborns in nursery A cried less, suffered fewer minor ailments, and gained more weight than did newborns in a nursery with no music.
- D. The music played in nursery A was louder than that played in nursery B.
- E. The ratio of nurses to newborns in nursery B was 1 to 4; in nursery A, it was 1 to 6.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 175

The ancient city of Cephessa was not buried by an eruption of Mt. Amnos in A.D. 310, as some believe. The eruption in the year 310 damaged the city, but it did not destroy it. Cephessa survived for another century before it finally met its destruction in another eruption around A.D. 415.

Which of the following, if true, would most strengthen the author's claim that the city of Cephessa was not buried by the eruption of Mt. Amnos in A.D. 310?

- A. The city of Cephessa is mentioned in a historical work known to have been written in A.D. 400.
- B. Coins bearing the image of an emperor who lived around A.D. 410 have been discovered in the ruins of Cephessa, which were preserved by the cinders and ashes that buried the city.
- C. Geological evidence shows that the eruption of Mt. Amnos in A.D. 415 deposited a 10-foot-thick layer of lava on the city of Cephessa.
- D. Artworks from the city of Cephessa have been found in the ruins of another city known to have been destroyed in A.D. 420.
- E. A historical work written in A.D. 430 refers to the eruption of Mt. Amnos in A.D. 415.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 176

June is taller than Kristin.
Letty is taller than Maria.
Maria is shorter than Nancy.
Kristin and Nancy are exactly the same height.
If the information above is true, which of the following must also be true?

- A. Letty is taller than Nancy.
- B. Letty is taller than June.
- C. Kristin is shorter than Letty.
- D. June is taller than Maria.
- E. Kristin is shorter than Maria.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 177

Current farm policy is institutionalized penalization of consumers. It increases food prices for middle- and low-income families and costs the taxpayer billions of dollars a year. Which of the following statements, if true, would provide support for the author's claims above?

- A. Farm subsidies amount to roughly \$20 billion a year in federal payouts and \$12 billion more in higher food prices.
 - II. According to a study by the Department of Agriculture, each \$1 of benefits provided to farmers for ethanol production costs consumers and taxpayers \$4.
 - III. The average full-time farmers have an average net worth of over \$300,000.
- B. I only
- C. II only
- D. III only
- E. I and II only
- F. I, II, and III

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 178

Reva: Using extraneous incentives to get teenagers to change their attitude toward school and schoolwork won't work. Take the program in West Virginia, for instance, where they tried to reduce their dropout rate by revoking the driving licenses of kids who left school. The program failed miserably.

Anne: It's true that the West Virginia program failed, but many schools have devised incentive programs that have been very successful in improving attendance and reducing discipline problems.

According to Anne, the weak point in Reva's claim is that it

- A. fails to consider the possibility that the majority of potential dropouts in West Virginia do not have driving licenses
- B. doesn't provide any exact figures for the dropout rate in West Virginia before and during the program
- C. ignores a substantial body of evidence showing that parents and employers have been using extrinsic incentives with positive results for years
- D. assumes that a positive incentive--a prize or a reward--will be no more effective than a negative incentive, like the revoking of a driving license
- E. is based on a single example, the incentive program in West Virginia, which may not be typical

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 179

In many surveys, American consumers have expressed a willingness to spend up to 10 percent more for products that are ecologically sound. Encouraged by such surveys, Bleach-O Corporation promoted a new laundry detergent, Bleach-O Green, as safer for the environment. Bleach-O Green cost 5 percent more than typical detergents. After one year, Bleach-O Green had failed to capture a significant share of the detergent market and was withdrawn from sale.

Which of the following questions is LEAST likely to be relevant in determining the reasons for the failure of Bleach-O Green?

- A. How effective as a detergent was Bleach-O Green?
- B. How many other detergents on the market were promoted as safe for the environment?
- C. How much more did Bleach-O Green cost to manufacture than ordinary detergents?
- D. To what extent did consumers accept the validity of Bleach-O Green advertised and promoted to consumers?
- E. How effectively was Bleach-O Green advertised and promoted to consumers?

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 180

The burden of maintaining the U.S. highway system falls disproportionately on the trucking industry. Trucks represent only about 10 percent of the vehicles on U.S. roads. Yet road use taxes assessed on trucks amount to almost half the taxes paid for highway upkeep and repair.

Which of the following, if true, would most weaken the argument above?

- A. The trucking industry has enjoyed record after-tax profits in three of the past four years.
- B. Because of their weight, trucks cause over 50 percent of the damage sustained by highway surfaces each year.
- C. Without an economically viable trucking industry, the cost of goods in the United States would rise significantly.
- D. Road use taxes paid by trucking companies have decreased by 3 percent over the past five years.
- E. Due to years of neglect, U.S. highways today are badly in need of major repairs and rebuilding.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 181

The upcoming presidential election in the West African republic of Ganelon is of grave concern to the

- A. S. State Department. Ganelon presently has strong political and military ties to the United States. However, the Socialist party is widely expected to win the election, leading to fears that Ganelon will soon break away from the pro-American bloc and adopt a nonaligned or openly anti-American stance. Which of the following is an assumption made in the passage above?
- B. A Socialist party government in Ganelon is more likely to oppose the United States than is a non-Socialist party government.
- C. The people of the United States recognize their nation's interest in the political stability of West Africa.
- D. A weakening of U.S. political ties with Ganelon could have serious consequences for U.S. relations with other African nations.
- E. The Socialist party leaders in Ganelon believe that their nation's interests would best be served by an alliance with anti-American forces.
- F. The Socialist party will win the upcoming election in Ganelon.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 182

No nation can long survive unless its people are united by a common tongue. For proof, we need only consider Canada, which is being torn asunder by conflicts between French-speaking Quebec and the other provinces, which are dominated by English speakers.

Which of the following, if true, most effectively challenges the author's conclusion?

- A. Conflicts over language have led to violent clashes between the Basque-speaking minority in Spain and the Spanish-speaking majority.
- B. Proposals to declare English the official language of the United States have met with resistance from members of Hispanic and other minority groups.
- C. Economic and political differences, along with linguistic ones, have contributed to the provincial conflicts in Canada.
- D. The public of India, in existence since 1948, has a population that speaks hundreds of different, though related, languages.
- E. Switzerland has survived for nearly a thousand years as a home for speakers of three different languages.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 183

As an experienced labor organizer and the former head of one of the nation's most powerful labor unions, Grayson is an excellent choice to chair the new council on business-labor relations. Which of the following, if true, would most strengthen the conclusion above?

- A. The new council must have the support of the nation's labor leaders if it is to succeed.
- B. During his years as a labor leader, Grayson established a record of good relations with business leaders.
- C. The chair of the new council must be a person who can communicate directly with the leaders of the nation's largest labor unions.
- D. Most of the other members of the new council will be representatives of business management interests.
- E. An understanding of the needs and problems of labor is the only qualification necessary for the job of chairing the new council.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 184

In the effort to fire a Civil Service employee, his or her manager may have to spend up to \$100,000 of tax money. Since Civil Service employees know how hard it is to fire them, they tend to loaf. This explains in large part why the government is so inefficient. It can be properly inferred on the basis of the

statements above that the author believes which of the following?

- A. Too much job security can have a negative influence on workers.
 - II. More government workers should be fired.
 - III. Most government workers are Civil Service employees.
- B. I only
- C. I and III only
- D. II only
- E. I, II, and III
- F. III only

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 185

Some commentators complain that a "litigation explosion" in the past decade has led to unreasonably high costs for U.S. businesses by encouraging more product liability suits against manufacturers. However, these complaints are based mainly on myth. Statistics show that the number of successful product liability suits has remained almost the same, and the average sum awarded in damages has grown no faster than the inflation rate. Which of the following, if true, would most weaken the argument above?

- A. The number of unsuccessful suits has skyrocketed, imposing huge new legal expenses on businesses.
- B. Several of the largest awards ever made in product liability cases occurred within the last two years.
- C. The rise of the consumer movement has encouraged citizens to seek legal redress for product flaws.
- D. Lawyers often undertake product liability cases on a contingency basis, so their payment is based on the size of the damages awarded.
- E. Juries often award damages in product liability suits out of emotional sympathy for an injured consumer.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 186

Ronald: According to my analysis of the national economy, housing prices should not increase during the next six months unless interest rates drop significantly. Mark: I disagree. One year ago, when interest rates last fell significantly, housing prices did not increase at all.

It can be inferred from the conversation above that Mark has interpreted Ronald's statement to mean that

- A. housing prices will rise only if interest rates fall
- B. if interest rates fall, housing prices must rise
- C. interest rates and housing prices tend to rise and fall together
- D. interest rates are the only significant economic factor affecting housing prices
- E. interest rates are likely to fall significantly in the next six months

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 187

It's time we stopped searching for new statistics to suggest that we are not spending enough on education. In fact, education spending increased 30 percent overall during the last decade. Which of the following, if true, would most weaken the argument above?

- A. Despite increased spending on education, enrollment in our elementary and secondary schools declined about 4 percent during the last ten years.
- B. Our spending on gasoline increased more than 100 percent during the last decade.
- C. When adjusted for inflation, our per-pupil expenditure on education this year is less than it was ten years ago.
- D. Eleven other economically developed nations spend more on education than we do.
- E. The achievement levels of our students have been declining steadily since 1960, and the last decade produced no reversal in this trend.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 188

The U.S. census is not perfect: thousands of Americans probably go uncounted. However, the basic statistical portrait of the nation painted by the census is accurate. Certainly some of the poor go uncounted, particularly the homeless; but some of the rich go uncounted as well, because they are often abroad or traveling between one residence and another.

Which of the following is an assumption on which the argument above depends?

- A. Both the rich and the poor have personal and economic reasons to avoid being counted by the census.
- B. All Americans may reasonably be classified as either poor or rich.

- C. The percentage of poor Americans uncoun-
ted by the census is close to the percentage of rich Americans uncoun-
ted.
- D. The number of homeless Americans is approxi-
mately equal to the number of rich Americans.
- E. The primary purpose of the census is to analyze the economic status of the American population.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 189

Which of the following best completes the passage below? In today's pluralistic society, textbook publishers find themselves in an increasingly uncomfortable position. Since the schools are regarded as a repository of society's moral and cultural values, each group within society wishes to prevent any material that offends its own values from appearing in textbooks. As a result, stance on an issue is certain to run afoul of one group or another. And since textbook publishers must rely on community goodwill to sell their books, it is inevitable that_____

- A. fewer and fewer publishers will be willing to enter the financially uncertain textbook industry
- B. the ethical and moral content of textbooks will become increasingly neutral and bland
- C. more and more pressure groups will arise that seek to influence the content of textbooks
- D. the government will be forced to intervene in the increasingly rancorous debate over the content of textbooks
- E. school boards, teachers, and principals will find it nearly impossible to choose among the variety of textbooks being offered

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 190

We have heard a good deal in recent years about the declining importance of the two major political parties. It is the mass media, we are told, that decide the outcome of elections, not the power of the parties. But it is worth noting that no independent or third-party candidate has won any important election in recent years, and in the last nationwide campaign, the two major parties raised and spent more money than ever before in support of their candidates and platforms. It seems clear that reports of the imminent demise of the two-party system are premature at best. Which of the following is an assumption made in the argument above?

- A. The amount of money raised and spent by a political party is one valid criterion for judging the influence of the party.
- B. A significant increase in the number of third-party candidates would be evidence of a decline in the importance of the two major parties.
- C. The two-party system has contributed significantly to the stability of the American political structure.

- D. The mass media tend to favor an independent or third-party candidate over a candidate from one of the two major parties.
- E. The mass media are relatively unimportant in deciding the outcome of most elections.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 191

We have heard a good deal in recent years about the declining importance of the two major political parties. It is the mass media, we are told, that decide the outcome of elections, not the power of the parties. But it is worth noting that no independent or third-party candidate has won any important election in recent years, and in the last nationwide campaign, the two major parties raised and spent more money than ever before in support of their candidates and platforms. It seems clear that reports of the imminent demise of the two-party system are premature at best.

Which of the following, if true, would most strengthen the argument above?

- A. The percentage of voters registered as independents is higher today than ever before.
- B. In a recent presidential campaign, for the first time ever, an independent candidate was invited to appear in a televised debate with the major-party candidates.
- C. Every current member of the U.S. Senate was elected as the candidate of one of the two major parties.
- D. In a recent opinion poll, most voters stated that a candidate's party affiliation was an insignificant factor in judging his or her fitness for office.
- E. In the last four years, the outcome of several statewide elections has been determined by the strength of the third-party vote.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 192

Psychologists conducted a series of experiments to test the effect upon schoolchildren of violence in films. In the first experiment, grammar school children were shown a film that included scenes of a male teenager engaging in violent acts against others, such as punching, pushing, and kicking. During a free-play session following the film viewing, 42 percent of the children were observed to engage in one or more violent acts similar to those in the film. In a second experiment, a different group of children was shown a similar film featuring a female teenager. Only 14 percent of the children were observed behaving violently afterward. The psychologists concluded that children are more likely to imitate violent behavior on film when a male model is shown than when a female model is shown. Which of the following, if true, would most seriously weaken the psychologists' conclusion?

- A. In both experiments, the victims of the filmed violence included both males and females.

- B. In the second experiment, 28 percent of the children appeared upset during the viewing the violent film scenes.
- C. The first group included 19 male students and 20 female students; the second group included 20 male students and 21 female students.
- D. In the first group, 58 percent of the children appeared bored during the showing of the film, and 12 percent fell asleep.
- E. The percentage of children known to have discipline problems prior to the experiment was greater in the first group than in the second group.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 193

Mainline Airways was bought by its employees six years ago. Three years ago, Mainline hired QualiCo Advertising Agency to handle its promotions and advertising division. Today Mainline's profits are over 20 percent higher than they were five years ago and 10 percent higher than they were three years ago. Employee ownership and a good advertising agency have combined to make Mainline more profitable.

Which of the following best describes the weak point in the argument above?

- A. It fails to establish a causal connection between the change in ownership at Mainline Airways and the hiring of QualiCo, on the one hand, and the rise in Mainline's profits, on the other.
- B. It presents no evidence showing that employee-owned airlines are any more profitable than other airlines.
- C. It assumes that the profits of Mainline Airways will continue to rise.
- D. It gives no exact figures for the current profits of Mainline Airways.
- E. It fails to explain how the profits of Mainline Airways are calculated.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 194

At many colleges today, regulations have been imposed that forbid the use in speech or print of language that "offends" or "insults" the members of any group, especially women and racial, ethnic, and religious minorities. Although these regulations are defended in the name of "democracy," they restrict freedom of speech and the press in a way that opposes the true spirit of democracy. The argument above attempts to prove its case primarily by

- A. impugning the credentials of an opponent
- B. providing examples that support a theoretical principle
- C. taking advantage of inconsistencies in the definition of "democracy"

- D. revealing a contradiction in an opposing point of view
- E. appealing to the patriotic feelings of its audience

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 195

In 1980, a Danish ten-øre coin minted in 1747 was sold at auction for \$8,000. Eleanor Bixby owns another Danish ten-øre coin minted in 1747. When she puts it on the market next week, it will fetch a price over \$18,000.

Which of the following, if true, would most weaken the conclusion drawn above?

- A. Since 1980, the average price for rare coins has increased by over 150 percent.
- B. There are only four coins like the one in question in the entire world.
- C. Since 1980, the consumer price index has risen by over 150 percent.
- D. In 1986, a previously unknown cache of one hundred coins just like the one in question was found.
- E. Thirty prominent, wealthy coin collectors are expected to bid for Bixby's coin.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 196

Merco has been in business longer than Nolen. Inc, Olean Industries was founded years before the Potter Company, and the Potter Company was started years after the Quarles Corporation. Nolen, Inc., and the Quarles Corporation were founded in the same year. If the information above is true, which of the following must also be true?

- A. Olean Industries has been in business for more years than Merco.
- B. Olean Industries has been in business for more years than the Quarles Corporation.
- C. Nolen, Inc., has not been in business for as many years as Olean Industries.
- D. Merco has been in business for more years than the Potter Company.
- E. Nolen, Inc., has not been in business for as many years as the Potter Company.

Correct Answer: D

Section: Critical Reasoning Questions**Explanation****Explanation/Reference:****QUESTION 197**

Which of the following best completes the passage below? A primary factor in perpetuating the low salaries of women workers has been their segregation in the so-called pink-collar occupations, such as nursing, teaching, library science, and secretarial work. Partly because these jobs have traditionally been held by women, their salary levels have been depressed, and, despite increased attempts to unionize these workers in recent years, their pay continues to lag. Moreover, although a large percentage of women than ever before are now entering and remaining in the job market, most continue to gravitate toward the pink-collar fields, despite the lower salaries. It seems clear, therefore, that if the average salaries of women workers are to approach those of men, _____

- A. labor unions must redouble their efforts to improve the lot of working women
- B. society's perception of pink-collar jobs as less important and less demanding than other jobs must be changed
- C. more men must be encouraged to enter fields traditionally occupied by women
- D. the number of jobs in the pink-collar fields relative to the size of the work force as a whole must be markedly increased
- E. more women must enter occupations other than those traditionally reserved for them

Correct Answer: E

Section: Critical Reasoning Questions**Explanation****Explanation/Reference:****QUESTION 198**

Determining the authenticity of purported pre-Columbian artifacts is never easy. Carbon-14 dating of these artifacts is often impossible due to contamination by radioactive palladium (which occurs naturally in the soils of Central and South America). However, historians and anthropologists have evolved two reliable criteria, which, utilized in combination, have proven effective for dating these artifacts. First, because authentic pre-Columbian artifacts characteristically occur in a coarse, granular matrix that is shifted by major earthquakes, they often exhibit the unique scratch patterns known as girding. In addition, true pre-Columbian artifacts show a darkening in surface color that is caused by centuries of exposure to the minute amounts of magnesium in the soil of the Americas. The criteria above would be LEAST useful in judging the authenticity of which of the following?

- A. An ax head of black obsidian, unearthed from a kitchen midden
- B. A pottery bowl with a red ocher design, found in the ruins of a temple
- C. A set of gold ear weights, ornamented with jasper pendants
- D. A black feather cape from a king's burial vault
- E. A multicolored woven sash found near the gravesite of a slave

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 199

From time to time, the press indulges in outbursts of indignation over the use of false or misleading information by the U.S. government in support of its policies and programs. No one endorses needless deception. But consider this historical analogy. It is known that Christopher Columbus, on his first voyage to the New World, deliberately falsified the log to show a shorter sailing distance for each day out than the ships had actually traveled. In this way, Columbus was able to convince his skeptical sailors that they had not sailed past the point at which they expected to find the shores of India. Without this deception, Columbus's sailors might well have mutinied, and the New World might never have been discovered.

The author of the passage above assumes each of the following EXCEPT:

- A. Government deception of the press is often motivated by worthy objectives.
- B. Without government deception, popular support for worthwhile government policies and programs might well fade.
- C. Attacks on the government by the press are often politically motivated.
- D. Deception for deception's sake should not be condoned.
- E. A greater good may sometimes require acceptance of a lesser evil.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 200

From time to time, the press indulges in outbursts of indignation over the use of false or misleading information by the U.S. government in support of its policies and programs. No one endorses needless deception. But consider this historical analogy. It is known that Christopher Columbus, on his first voyage to the New World, deliberately falsified the log to show a shorter sailing distance for each day out than the ships had actually traveled. In this way, Columbus was able to convince his skeptical sailors that they had not sailed past the point at which they expected to find the shores of India. Without this deception, Columbus's sailors might well have mutinied, and the New World might never have been discovered.

Which of the following is the main weakness of the historical analogy drawn in the passage above?

- A. The sailors in Columbus's crew never knew that they had been deceived, while government deception is generally uncovered by the press.
- B. A ship's log is a record intended mainly for use by the captain, while press reports are generally disseminated for use by the public at large.
- C. The members of a ship's crew are selected by the captain of the ship, while those who work in the press are self-selected.
- D. The crew of a ship is responsible for the success of a voyage, while the press is not responsible for the use others make of the factual information it

publishes.

- E. In a democracy, the people are expected to participate in the nation's political decision making, while the members of a ship's crew are expected simply to obey the orders of the captain.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 201

Which of the following best completes the passage below? Monarch butterflies, whose average life span is nine months, migrate from the Midwestern United States to selected forests outside Mexico City. It takes at least three generations of monarchs to make the journey, so the great-great-grandchildren who finally arrive in the Mexican forests have never been there before. Yet they return to the same trees their forebears left. Scientists theorize that monarchs, like homing pigeons, map their routes according to the earth's electromagnetic fields. As a first step in testing this theory, lepidopterists plan to install a low-voltage transmitter inside one grove of "butterfly trees" in the Mexican forests. If the butterflies are either especially attracted to the grove with the transmitter or especially repelled by it, lepidopterists will have evidence that_____

- A. monarch butterflies have brains, however minuscule
- B. monarch butterflies are sensitive to electricity
- C. low-voltage electricity can affect butterflies, whether positively or adversely
- D. monarchs map their routes according to the earth's electromagnetic fields
- E. monarchs communicate in intergenerational ally via electromagnetic fields

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 202

In general, a professional athlete is offered a million-dollar contract only if he or she has just completed an unusually successful season. However, a study shows that an athlete signing such a contract usually suffers a decline in performance the following season. This study supports the theory that a million-dollar contract tends to weaken an athlete's desire to excel by diminishing his or her economic incentive. Which of the following, if true, would most strengthen the conclusion drawn above?

- A. On the average, athletes whose contracts call for relatively small salaries with possible bonuses for outstanding achievement perform better than other athletes.
- B. Athletes are generally offered million-dollar contracts mainly because of the increased ticket sales and other revenues they generate.

- C. Many professional athletes have careers marked by year-to-year fluctuations in their overall levels of performance.
- D. On the average, higher-salaried athletes tend to have longer and more successful professional careers than do lower-salaried athletes.
- E. Six of the ten leading batters in the National League this season signed million-dollar contracts during the off-season.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 203

Dr. A: The new influenza vaccine is useless at best and possibly dangerous. I would never use it on a patient.

Dr. B: But three studies published in the Journal of Medical Associates have rated that vaccine as unusually effective.

Dr. A: The studies must have been faulty because the vaccine is worthless. In which of the following is the reasoning most similar to that of Dr. A?

- A. Three of my patients have been harmed by that vaccine during the past three weeks, so the vaccine is unsafe.
- B. Jerrold Jersey recommends this milk, and I don't trust Jerrold Jersey, so I won't buy this milk.
- C. Wingzz tennis balls perform best because they are far more effective than any other tennis balls.
- D. I'm buying Vim Vitamins. Doctors recommend them more often than they recommend any other vitamins, so Vim Vitamins must be good.
- E. Since University of Muldoon graduates score about 20 percent higher than average on the GMAT, Sheila Lee, a University of Muldoon graduate, will score about 20 percent higher than average when she takes the GMAT.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 204

Bill: Smoke-detecting fire alarms can save lives. I believe that every apartment in this city should be required by law to be equipped with a smoke detector.

Joe: I disagree with your proposal. Smoke detectors are just as important for safety in private houses as they are in apartment.

From this exchange, it can be inferred that Joe has interpreted Bill's statement to mean that

- A. the city should be responsible for providing smoke detectors for apartments
- B. residences outside the city should not be equipped with smoke detectors
- C. only apartments should be equipped with smoke detectors
- D. the risk of fire is not as great in private houses as it is in apartments

E. the rate of death by fire is unusually high in the city in question

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 205

In 1986, the city of Los Diablos had 20 days on which air pollution reached unhealthful amounts and a smog alert was put into effect. In early 1987, new air pollution control measures were enacted, but the city had smog alerts on 31 days that year and on 39 days the following year. In 1989, however, the number of smog alerts in Los Diablos dropped to sixteen. The main air pollutants in Los Diablos are ozone and carbon monoxide, and since 1986 the levels of both have been monitored by gas spectrography.

Which of the following statements, assuming that each is true, would be LEAST helpful in explaining the air pollution levels in Los Diablos between 1986 and 1989?

- A. The 1987 air pollution control measures enacted in Los Diablos were put into effect in November of 1988.
- B. In December of 1988 a new and far more accurate gas spectrometer was invented.
- C. In February of 1989, the Pollution Control Board of Los Diablos revised the scale used to determine the amount of air pollution considered unhealthful.
- D. In 1988 the mayor of Los Diablos was found to have accepted large campaign donations from local industries and to have exempted those same industries from air pollution control measures.
- E. Excess ozone and carbon monoxide require a minimum of two years to break down naturally in the atmosphere above a given area.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 206

In a marketing study, consumers were given two unlabeled cartons of laundry detergent. One carton was bright green and yellow; the other was drab brown and gray. After using the detergent in the two cartons for one month, 83 percent of the consumers in the study reported that the detergent in the bright green and yellow carton cleaned better. This study shows that packaging has a significant impact on consumers' judgment of the effectiveness of a laundry detergent. Which of the following, if true, would most strengthen the conclusion drawn in the marketing study?

- A. The detergent in the bright carton contained bleach crystals; the detergent in the drab carton did not.
- B. The detergents in the two cartons were the same.
- C. The detergents in the two cartons were different, but they had both been laboratory tested.

- D. The detergent in the drab carton was a popular name brand; the detergent in the bright carton was generic.
- E. The detergent in the drab carton was generic; the detergent in the bright carton was a popular name brand.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 207

Don's, a chain of supermarkets, has entered into an agreement in which Rose Computers will sell Don's an unlimited number of its least expensive PC's at one-fourth the regular wholesale price. In return, Don's has agreed to purchase all of its scanners and other electronic information-processing equipment from Rose or from Omicron, Rose Computers' parent company, for the next ten years. Don's will offer a Rose PC free to any school that turns in Don's register receipts totaling \$100,000 within the next six months. The vice-president in charge of advertising for Don's expects that the computer giveaway will obviate the need for a massive new advertising campaign for the next six months and that Don's can make up the expenditures for the PC's by writing them off its income taxes as charitable donations.

The plans formulated by Don's assume each of the following EXCEPT:

- A. The prices that Rose or Omicron charges Don's for information-processing equipment over the next ten years will be lower than those charged by other companies.
- B. The tax laws will not be changed to exclude or lessen the value of charitable donations as tax write- offs.
- C. Schools will be sufficiently attracted by Don's computer giveaway offer that teachers will urge students to shop at Don's.
- D. Rose will be able to supply Don's with a sufficient number of PC's to meet the demand generated by schools that collect Don's receipts totaling \$100,000.
- E. The effect of the computer giveaway offer on Don's business will be comparable to that of a major advertising campaign.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 208

Manufacturers of household appliances are still urging the public to purchase food processors. The various manufacturers' advertisements all point out that the prices of these appliances are now lower than ever and that each food processor comes with a lifetime service warranty. In addition, many manufacturers offer sizable rebates to customers who purchase food processors within a given time period. With these incentives, the advertisements contend, people can hardly afford not to purchase food processors.

Which answer choice is a logically prior issue that the manufacturers' advertisements fail to address?

- A. Whether the cost of repairs to the food processors over the years will cancel out the savings currently being offered
- B. Whether potential customers have enough uses for food processors to justify purchasing them
- C. Whether the heads of the companies manufacturing food processors own food processors themselves
- D. Whether the food processors currently being advertised will be outdated within the next five years
- E. Whether accessories and replacement parts will be readily available at retail outlets

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 209

Since the invention of digital readout, machine designers have rushed to replace conventional dials and gauges with digital units. Yet the digital gauge has drawbacks in some situations. Since it presents an exact numeric value, it must be decoded and analyzed by a human operator; its meaning cannot be read in an instantaneous scanning. An analog dial or gauge can be marked with red to alert the operator when a value is entering a danger zone; a digital gauge cannot. And it is difficult to tell whether a digital readout is increasing or decreasing over time, while the up or down movement of a pointer on an analog gauge can be quickly and easily observed.

The author of the passage above would probably recommend the use of digital gauge in cases when

- A. warning of a sudden rise or fall in value is needed
II. an operator must read and interpret several gauges within a few seconds III. a precise numeric value is essential
- B. I only
- C. III only
- D. I and III only
- E. II and III only
- F. I, II, and III

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 210

Contrary to the statements of labor leaders, the central economic problem facing America today is not the distribution of wealth. It is productivity. With the productivity of U.S. industry stagnant, or even declining slightly, the economic pie is no longer growing. Labor leaders, of course, point to what they consider an unfair distribution of the slices of pie to justify their demands for further increases in wages and benefits. And in the past, when the pie was

still growing, management could afford to acquiesce. No longer. Until productivity resumes its growth, there can be no justification for further increases in the compensation of workers.

Which of the following statements by a labor leader focuses on the logical weakness in the argument above?

- A. Although the economic pie is no longer growing, the portion of the pie allocated to American workers remains unjustly small.
- B. If management fails to accommodate the demands of workers, labor leaders will be forced to call strikes that will cripple the operation of industry.
- C. Although productivity is stagnant, the U.S. population is growing, so that the absolute size of the economic pie continues to grow as well.
- D. As a labor leader, I can be concerned only with the needs of working people, not with the problems faced by management.
- E. The stagnation of U.S. industry has been caused largely by factors--such as foreign competition-- beyond the control of American workers.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 211

Freud's theories of the workings of the mind, while brilliant for their day, were formulated before most of this century's great advances in neurophysiology and biochemistry. Today, we have a far deeper understanding of the biological components of thought, emotion, and behavior than was dreamed of eighty years ago. It would be foolish to continue parroting Freud's psychological theories as if these advances had never occurred.

It can be inferred from the passage above that the author would be most likely to favor

- A. the abandonment of most of Freud's theories
- B. a greater reliance on biological rather than psychological explanations of behavior
- C. a critical reexamination of Freud's place in the history of psychology
- D. a reexamination of Freud's theories in the light of contemporary biology
- E. increased financial support for studies in neurophysiology and biochemistry

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 212

To avoid a hostile takeover attempt, the board of directors of Wellco, Inc., a provider of life and health insurance, planned to take out large loans and use them to purchase a publishing company, a chocolate factory, and a nationwide chain of movie theaters. The directors anticipated that these purchase initially would plunge the corporation deep into debt, rendering it unattractive to those who wanted to take it over, but that steadily rising insurance rates would allow the company to pay off the debt within five years. Meanwhile, revenues from the three new businesses would enable the

corporation as a whole to continue to meet its increased operating expenses. Ultimately, according to the directors' plan, the diversification would strengthen the corporation by varying the sources and schedules of its annual revenues.

Which of the following, assuming that all are equally possible, would most enhance the chances of the plan's success?

- A. A widespread drought decreases the availability of cacao beans, from which chocolate is manufactured, driving up chocolate prices worldwide.
- B. New government regulations require a 30 percent across-the-board rate rollback of all insurance companies, to begin immediately and to be completed within a five-year period.
- C. Congress enacts a statute, effective after six months, making it illegal for any parent not to carry health insurance coverage for his or her child.
- D. Large-screen televisions drop dramatically in price due to surprise alterations in trade barriers with Japan; movie theater attendance dwindles as a consequence.
- E. A new, inexpensive process is discovered for making paper pulp, and paper prices fall to 60 percent of their former level.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 213

In 1981, for the first time in over two decades, the average scores of high school students on standardized math and English tests did not decline. During the same year, millions of American students enjoyed their first exposure to the new world of the microcomputer, whether in schools, video arcades, or other settings. The conclusion is clear: far from stultifying the intellectual capacities of students, exposure to computers can actually enhance them. The most serious weakness of the argument above is its failure to

- A. discuss the underlying causes of the twenty-year decline in students' test scores
- B. cite specific figures documenting the increases in test scores
- C. distinguish among the various types of computer being used by high school students
- D. define the intellectual capacities tested by the standardized math and English tests referred to
- E. explain exactly how high school students' abilities on math and English tests could have been enhanced by exposure to computers

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 214

Although its purpose is laudable, the exclusionary rule, which forbids a court to consider evidence seized in violation of the defendant's constitutional rights, has unduly hampered law-enforcement efforts. Even when the rights violation was a minor or purely technical one, turning on a detail of

procedure rather than on the abrogation of some fundamental liberty, and even when it has been clear that the police officers were acting in good faith, the evidence obtained has been considered tainted under this rule and may not even be introduced. In consequence, defendants who were undoubtedly guilty have been set free, perhaps to steal, rape, or murder again. The author of the passage above assumes all of the following EXCEPT:

- A. The constitutional rights of criminal defendants should be protected.
- B. Most cases in which the exclusionary rule has been invoked have involved purely technical violations of constitutional principles.
- C. The number of cases whose outcome has been affected by the exclusionary rule is significant.
- D. Some of the defendants set free under the exclusionary rule have been guilty of serious criminal offenses.
- E. Merely technical violations of the rules concerning evidence should be treated differently from deliberate assaults upon human rights.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 215

Although its purpose is laudable, the exclusionary rule, which forbids a court to consider evidence seized in violation of the defendant's constitutional rights, has unduly hampered law-enforcement efforts. Even when the rights violation was a minor or purely technical one, turning on a detail of procedure rather than on the abrogation of some fundamental liberty, and even when it has been clear that the police officers were acting in good faith, the evidence obtained has been considered tainted under this rule and may not even be introduced. In consequence, defendants who were undoubtedly guilty have been set free, perhaps to steal, rape, or murder again.

It can be inferred from the passage that the author would most likely endorse which of the following proposals?

- A. Change of the exclusionary rule to admit evidence obtained by police officers acting in good faith
- B. A constitutional amendment curtailing some of the protections traditionally afforded those accused of a crime
- C. A statute limiting the application of the exclusionary rule to cases involving minor criminal offenses
- D. Change of the exclusionary rule to allow any evidence, no matter how obtained, to be introduced in court
- E. A constitutional amendment allowing police officers to obtain vital evidence by any means necessary when in pursuit of a known criminal

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 216

The postal service is badly mismanaged. Forty years ago, first-class letter delivery cost only three cents. Since then, the price has increased nearly

tenfold, with an actual decrease in the speed and reliability of service.

Each of the following statements, if true, would tend to weaken the argument above EXCEPT:

- A. The volume of mail handled by the postal service has increased dramatically over the last forty years.
- B. Unprecedented increases in the cost of fuel for trucks and planes have put severe upward pressures on postal delivery costs.
- C. Private delivery services usually charge more than does the postal service for comparable delivery charges.
- D. The average delivery time for a first-class letter four decades ago was actually slightly longer than it is today.
- E. The average level of consumer prices overall has increased more than 300 percent over the last forty years.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 217

When the government of a nation announced recently that a leader of the nation's political opposition had died of a mysterious illness in prison, few seasoned observers of the regime were surprised. As the police captain in an old movie remarked when asked about the condition of a prisoner, "We're trying to decide whether he committed suicide or died trying to escape." The statements above invite which of the following conclusions?

- A. The opposition leader was probably killed trying to escape from prison.
- B. The opposition leader may not be dead at all.
- C. It is unlikely that the head of the regime knows the true cause of the opposition leader's death.
- D. The opposition leader probably killed himself.
- E. The regime very likely was responsible for the death of the opposition leader.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 218

In the industrialized nations, the last century has witnessed a shortening of the average workday from twelve hours or longer to less than eight hours. Mindful of this enormous increase in leisure time over the past century, many people assume that the same trend has obtained throughout history, and that, therefore, prehistoric humans must have labored incessantly for their very survival. We cannot, of course, directly test this assumption. However, a study of primitive peoples of today suggests a different conclusion. The Mbuti of central Africa, for instance, spend only a few hours each day in hunting, gathering, and tending to other economic necessities. The rest of their time is spent as they choose. The implication is that the short workday is not peculiar to industrialized societies. Rather, both the extended workday of 1880 and the shorter workday of today are products of different stages of the

continuing process of industrialization.

Which of the following inferences about industrialization is best supported by the passage above?

- A. People in advanced industrialized societies have more leisure time than those in industrialized societies.
- B. An average workday of twelve hours or more is peculiar to economies in the early stages of industrialization.
- C. Industrialization involves a trade-off between tedious, monotonous jobs and the benefits of increased leisure.
- D. It is likely that the extended workday of an industrializing country will eventually be shortened.
- E. As industrialization progresses, people tend to look for self-fulfillment in leisure rather than work.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 219

In the industrialized nations, the last century has witnessed a shortening of the average workday from twelve hours or longer to less than eight hours. Mindful of this enormous increase in leisure time over the past century, many people assume that the same trend has obtained throughout history, and that, therefore, prehistoric humans must have labored incessantly for their very survival. We cannot, of course, directly test this assumption. However, a study of primitive peoples of today suggests a different conclusion. The Mbuti of central Africa, for instance, spend only a few hours each day in hunting, gathering, and tending to other economic necessities. The rest of their time is spent as they choose. The implication is that the short workday is not peculiar to industrialized societies. Rather, both the extended workday of 1880 and the shorter workday of today are products of different stages of the continuing process of industrialization.

Which of the following, if true, would most greatly strengthen the argument made in the passage above?

- A. In recent decades, the economy of the Mbuti has been markedly affected by the encroachment of modern civilization.
- B. The life-style of the Mbuti is similar to that of prehistoric humans.
- C. The Mbuti have no words in their language to express the distinction between work activities and leisure activities.
- D. The workday of a European peasant in medieval times averaged between eleven and fifteen hours.
- E. The members of the Shaklik tribe in central Asia have an average workday of ten to twelve hours.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 220

Gloria: Those who advocate tuition tax credits for parents whose children attend private schools maintain that people making no use of a government

service should not be forced to pay for it. Yet those who choose to buy bottled water rather than drink water from the local supply are not therefore exempt from paying taxes to maintain the local water supply. Roger: Your argument is illogical. Children are required by law to attend school. Since school attendance is a matter not of choice, but of legal requirement, it is unfair for the government to force some parents to pay for it twice. Which of the following responses by Gloria would best refute Roger's charge that her argument is illogical?

- A. Although drinking water is not required by law, it is necessary for all people, and therefore my analogy is appropriate.
- B. Those who can afford the tuition at a high-priced private school can well bear the same tax burden as those whose children attend public schools.
- C. If tuition tax credits are granted, the tax burden on parents who choose public schools will rise to an intolerable level.
- D. The law does not say that parents must send their children to private schools, only that the children must attend some kind of school, whether public or private.
- E. Both bottled water and private schools are luxury items, and it is unfair that some citizens should be able to afford them while others cannot.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 221

Since the passage of the state's Clean Air Act ten years ago, the level of industrial pollutants in the air has fallen by an average of 18 percent. This suggests that the restrictions on industry embodied in the act have worked effectively. However, during the same period the state has also suffered through a period of economic decline. The number of businesses in the state has fallen by 10 percent, and the number of workers employed has fallen by 12 percent. It is probable that the business decline, rather than the regulations in the act, is responsible for at least half of the decline in the pollution.

Which of following is an assumption made in the passage above?

- A. Most businesses in the state have obeyed the regulations embodied in the Clean Air Act.
- B. The economic decline of the state can be attributed, in part, to the effects of the Clean Air Act.
- C. The amount of air pollution in a given area is likely to be proportional to the number of businesses and workers active in that area.
- D. The restrictions on business activity in other states are less stringent than are those embodied in the Clean Air Act.
- E. The Clean Air Act has been only very slightly successful in achieving the goal of reduced air pollution.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 222

Since the passage of the state's Clean Air Act ten years ago, the level of industrial pollutants in the air has fallen by an average of 18 percent. This suggests that the restrictions on industry embodied in the act have worked effectively. However, during the same period the state has also suffered through a period of economic decline. The number of businesses in the state has fallen by 10 percent, and the number of workers employed has fallen by 12 percent. It is probable that the business decline, rather than the regulations in the act, is responsible for at least half of the decline in the pollution.

Which of the following, if true, would most seriously weaken the conclusion drawn in the passage above?

- A. During the last ten years, economic conditions in the nation as a whole have been worse than those within the state.
- B. Amendments to the Clean Air Act that were enacted six years ago have substantially strengthened its restrictions on industrial air pollution.
- C. Of the businesses that ceased operating in the state during the last ten years, only 5 percent were engaged in air-polluting industries.
- D. Several large corporations left the state during the last ten years partly in order to avoid compliance with the Clean Air Act.
- E. Due to its small budget, the state office charged with enforcement of the Clean Air Act has prosecuted only two violators of the law since its passage.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 223

A nutritionist studying the effects of massive doses of vitamin C found that of a group of 600 people who regularly took 1,500 mg of vitamin C daily for a year, fewer than 9 percent suffered serious cases of flu; of a group of 600 people who took 250 mg of vitamin C (the standard recommended daily allowance) daily for a year, 34 percent suffered at least one serious case of flu; and of a group of 600 people who took no vitamin C for a year (other than that found in the foods in a balanced diet), 32 percent suffered at least one serious case of flu.

Which of the following hypotheses is best supported by the evidence above?

- A. The effectiveness of vitamin C in preventing serious cases of flu increases in direct proportion to the amount of vitamin C taken.
- B. Vitamin C is helpful in preventing disease.
- C. Doses of vitamin C that exceed the standard recommended daily allowance by 500 percent will reduce the incidence of serious cases of flu by 25 percent.
- D. Massive doses of vitamin C can help to prevent serious case of flu.
- E. A balanced diet contains less than 250 mg of vitamin C.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 224

Susan: Those who oppose experimentation on animals do not properly value the preservation of human life. Although animal suffering is unfortunate, it is justifiable if it can lead to cures for human ailments. Melvin: But much animal experimentation involves testing of ordinary consumer products such as soaps, dyes, and cosmetics.

Susan: These experiments are justifiable on the same grounds, since cleanliness, convenience, and beauty are worthwhile human values deserving of support. Which of the following is the best statement of the logical flaw in Susan's argument?

- A. Her claim that animal experimentation is justifiable if it supports human values contradicts her claim that such experimentation is justifiable only if it leads to cures for human ailments.
- B. She places a higher value on human cleanliness, convenience, and beauty than she does on the preservation of animal life.
- C. She uses the word "value" in two different senses.
- D. She assumes that all ordinary consumer products aid in the preservation of human life.
- E. She fails to show how mere support for human values actually preserves human lives.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 225

Which of the following best completes the passage below?

As long as savings deposits are insured by the government, depositors will have no incentive to evaluate the financial strength of a savings bank. Yield alone will influence their choice of bank. To attract deposits, banks will be forced to offer the highest possible interest rates. And since paying higher rates inevitably strains the financial strength of a bank, _____

- A. the government will be forced to impose limitations on interest rates
- B. deposit insurance will ultimately lead to the financial weakening of many banks
- C. savers will be forced to choose between deposit insurance and higher interest rates
- D. deposits will tend to go to the banks with the greatest financial strength
- E. bank profits will tend to rise to ever-higher levels

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 226

Every painting hanging in the Hoular Gallery is by a French painter. No painting in the Hoular Gallery is by a Vorticist. Only Vorticists use acrylic monochromes in their works. If the information above is true, which of the following must also be true?

- A. No French painters are Vorticists.
- B. All Vorticists use acrylic monochromes in their works.
- C. Some French painters do not use acrylic monochromes in their works.
- D. No French painters use acrylic monochromes in their works.
- E. All French painters who use acrylics use acrylic monochromes in their works.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 227

We commonly speak of aesthetic judgments as subjective, and in the short term they are, since critics often disagree about the value of a particular contemporary work of art. But over time, the subjective element disappears. When works of art have continued to delight audiences for centuries, as have the paintings of Michelangelo, the music of Bach, and the plays of Shakespeare, we can objectively call them great. The statements above best support which of the following conclusions?

- A. When Michelangelo, Bach, and Shakespeare were alive, critics disagreed about the value of their work.
- B. The value of a contemporary work of art cannot be objectively measured.
- C. The reputation of a work of art often fluctuates greatly from one generation to the next.
- D. The mere fact that a work of art has endured for centuries does not establish its greatness.
- E. If critics agree about the value of a particular cotemporary work of art, then the work can objectively be called great.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 228

Since the 55-mile-per-hour speed limit was mandated on our highways, both money and human lives have been saved. All of the following, if true, would strengthen the claim above EXCEPT:

- A. Most highway users find that travel times are not appreciably lengthened by the 55-mile-per-hour speed limit.
- B. Highway driving at 55 miles per hour or less is more fuel-efficient than high-speed driving.
- C. Nearly all highway safety experts agree that more accidents occur at speeds over 55 miles per hour than at lower speeds.
- D. The percentage of fatalities occurring in highway accidents at speeds greater than 55 miles per hour is higher than that for low-speed accidents.
- E. Automobiles last longer and require fewer repairs when driven at consistently lower speeds.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 229

The city council will certainly vote to approve the new downtown redevelopment plan, despite the objections of environmentalists. After all, most of the campaign contributions received by members of the city council come from real estate development firms, which stand to benefit from the plan. Which of the following statements, if true, would most weaken the argument above?

- A. Several members of the city council receive sizable campaign contributions from environmental lobbying groups.
- B. Members of the city council are required to report the size and source of each campaign contribution they receive.
- C. Not every real estate development firm in the city will be able to participate in, and profit from, the new downtown redevelopment plan.
- D. The members of the city council have often voted in ways that are opposed to the interests of their campaign contributors.
- E. Some environmentalists have stated that the new downtown redevelopment plan might be environmentally sound if certain minor modifications are made.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 230

A mail order company recently had a big jump in clothing sales after hiring a copywriter and a graphic artist to give its clothing catalog a magazine like format designed to appeal to a more upscale clientele. The company is now planning to launch a house wares catalog using the same concept.

The company's plan assumes that

- A. otherhouse warescatalogs withmagazine likeformats do not already exist
- B. an upscale clientele would be interested in ahouse warescatalog

- C. the same copywriter and graphic artist could be employed for both the clothing and houseware catalogs
- D. a magazine like format requires a copywriter and a graphic artist
- E. customers to whom the old clothing catalog appealed would continue to make purchases from catalogs with the new format

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 231

Civic Leader: The high cancer rate among our citizens is the result of hazardous material produced at your plant.

Board of Directors: Our statistics show that rates of cancer are high throughout the valley in which the plant is situated because local wells that supply drinking water are polluted, not because of the plant. Which of the following, if true, most seriously weakens the board's claims?

- A. The statistics do not differentiate between types of cancer.
- B. Nearby communities have not changed the sources of their drinking water.
- C. Cancer-causing chemicals used at the plant are discharged into a nearby river and find their way into local wells.
- D. The plant both uses and produces chemicals that have been shown to cause cancer.
- E. Some of the pollutants cited by the board as contaminating the local wells have been present in the wells for decades.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 232

Economies in which a high percentage of resources are invested in research and development show greater growth in the long run than do those in which resources are channeled into consumption. Japanese workers spend a higher percentage of their income investing in research and development than do American workers.

To grow as fast as Japan has in the past three decades, the United States must change the tax code in order to encourage savings and investment and discourage debt. Which of the following, if true, tends to weaken the argument?

- A. Japanese research is more focused on consumers than is research by American firms.
- B. Class mobility, highly valued in American culture, is encouraged by a growing rather than a stagnant economy.
- C. Studies have shown that countries with high consumption rates prosper in the short run.
- D. Proposed changes to the tax code could involve strict limits on the deductibility of interest, and increased allowance for research.

- E. Because a decreasing percentage of the United States is under 40, an age when savings are traditionally low, the savings rate will increase without changes to the tax code.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 233

Television programming experts maintain that with each 1% increase in the prime-time ratings of a television station there is a 3.5% increase in the number of people who watch its evening news program. However, in the last ten years at Channel NTR, there was only one year of extremely high prime-time ratings and during that year, fewer people than ever watched Channel NTR's evening news program. Which of the following conclusions can properly be drawn from the statements above?

- A. When a news program has good ratings, the channel as a whole will have good ratings.
- B. The programming experts neglected to consider daytime news programs.
- C. The year of high ratings at NTR was a result of two hit shows which were subsequently canceled because of contractual problems.
- D. The ten-year period in question is not representative of normal viewing patterns.
- E. Prime-time ratings are not the only factor affecting how many people watch an evening news program.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 234

The people who are least likely to be audited by the Internal Revenue Service this year are those who have been audited since 1985 and who were found to have made no mistakes in filing their returns during that audit. Of the following people, who is MOST likely to be audited by the IRS?

- A. A person who was audited in 1986 but was not found to have made any mistakes in filing his return.
- B. A person who was audited in 1986 and whose lawyer corrected several mistakes in the tax return prior to the filing deadline.
- C. A person whose spouse was convicted of tax fraud in 1987, who was then audited and found to have made no mistakes.
- D. A person who was last audited in 1984, and had no mistakes uncovered by the IRS during that audit.
- E. A person who was audited in each of the past five years, but was found to have made no mistakes in any of the filings.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 235

James's grade point average puts him in the top third of the graduating class of college A. Nestor is in the top tenth of the same class. Elizabeth had the same grade point average as Nestor. Nancy has a lower grade point average than Elizabeth.

If the information above is true, which of the following must also be true?

- A. James has a higher grade point average than Elizabeth.
- B. James has a higher grade point average than Nancy.
- C. Nestor has a higher grade point average than Nancy.
- D. Elizabeth and Nancy both have a higher grade point average than James.
- E. Nestor and James both have a higher grade point average than Nancy.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 236

Whenever a major airplane accident occurs, there is a dramatic increase in the number of airplane mishaps reported, a phenomenon that may last for as long as a few months after the accident. Airline officials assert that the publicity given the gruesomeness of major airplane accidents focuses media attention on the airline industry and the increase in the number of reported accidents is caused by an increase in the number of news sources covering airline accident, not by an increase in the number of accidents.

Which of the following, if true, would seriously weaken the assertions of the airline officials?

- A. The publicity surrounding airline accidents is largely limited to the country in which the crash occurred.
- B. Airline accidents tend to occur far more often during certain peak travel months.
- C. News organizations do not have any guidelines to help them decide how severe or how close an accident must be for it to receive coverage.
- D. Airplane accidents receive coverage by news sources only when the news sources find it advantageous to do so.
- E. Studies by government regulations show that the number of airplane flight miles remains relatively constant from month to month.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 237

Investing in real estate would be a profitable venture at this time. A survey in House magazine revealed that 85% of the magazine's readers are planning to buy a second home over the next few years. A study of the real estate industry, however, revealed that the current supply of homes could only provide for 65% of that demand each year.

Which of the following, if true, reveals a weakness in the evidence cited above?

- A. Real estate is a highly labor-intensive business.
- B. Home builders are not evenly distributed across the country.
- C. The number of people who want second homes has been increasing each year for the past ten years.
- D. Readers of House magazine are more likely than most people to want second homes.
- E. House magazine includes articles about owning a second home as well as articles about building a second home.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 238

Investing in real estate would be a profitable venture at this time. A survey in House magazine revealed that 85% of the magazine's readers are planning to buy a second home over the next few years. A study of the real estate industry, however, revealed that the current supply of homes could only provide for 65% of that demand each year.

Which of the following, if true, would undermine the validity of the investment advice in the paragraph above?

- A. Some home owners are satisfied with only one home.
- B. About half of the people who buy homes are investing in their first home.
- C. About half of the people who buy homes have to take out a mortgage to do so.
- D. Only a quarter of the homes that are built are sold within the first two weeks.
- E. Only a quarter of those who claim that they want a second home actually end up purchasing one.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 239

Traffic safety experts predict that the installation of newly designed air bags in all cars in the United States would reduce the average number of fatalities per traffic accident by 30 percent. In order to save lives, the Department of Transportation (DOT) is considering requiring automobile manufacturers to install air bags of this design in all cars produced after 1998. Which of the following, if true, represents the strongest challenge to the DOT's proposal?

- A. Air bags of the new design are more given to being inadvertently triggered, an occurrence that can sometimes result in fatal traffic accidents.
- B. The DOT is planning to require automobile manufacturers to produce these air bags according to very strict specifications.
- C. After installing air bags in new cars, automobile manufacturers will experience an increase in sales.
- D. The proposed air bag installation program will adversely affect the resale of cars manufactured prior to 1998.
- E. As production costs increase, the profits of many domestic automobile dealers show a marked decrease.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 240

A private bus company gained greater profits and provided bus service to the area at lower fares by running buses more frequently and stimulating greater rider ship. Hoping to continue these financial trends, the company plans to replace all older buses with new, larger buses, including some double-decker buses,.

The plan of the bus company as described above assumes all of the following EXCEPT

- A. the demand for bus service in the company's area of service will increase in the future
- B. increased efficiency and revenues will compensate for any new expenses the company incurs
- C. the new buses will be sufficiently reliable to ensure the company a net financial gain once they are in place
- D. driving the new buses will be no more difficult than driving the buses they are to replace
- E. the larger, double-decker buses will not face obstacles such as height and weight restrictions in the bus company's area of service

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 241

A newly discovered disease is thought to be caused by a certain bacterium. However, recently released data notes that the bacterium thrives in the presence of a certain virus, implying that it is actually the virus that causes the new disease.

Which of the following pieces of evidence would most support the data's implication?

- A. In the absence of the virus, the disease has been observed to follow infection by the bacterium.
- B. The virus has been shown to aid the growth of bacterium, a process which often leads to the onset of the disease.
- C. The virus alone has been observed in many cases of the disease.
- D. In cases where the disease does not develop, infection by the bacterium is usually preceded by infection by the virus.
- E. Onset of the disease usually follows infection by both the virus and the bacterium.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 242

A sociologist recently studied two sets of teenagers. The members of one set spent 10 or more hours per week watching violent television programs, and the members of the other set spent 2 hours or less per week watching violent television programs. A significantly greater proportion of the teenagers in the former group exhibited aggressive behavior during the period of the study. The sociologists reasoned that the prolonged exposure to television violence caused the aggressive behavior. Which of the following, if true, of the teenagers in the study, provides the strongest challenge to the sociologist's conclusion?

- A. Some teenagers who watched more than 10 hours of violent television programming per week behaved less aggressively than others in the same group of teenagers.
- B. Some teenagers who watched 2 hours of violent television programming per week did not behave aggressively.
- C. Some teenagers voluntarily stopped watching violent television programs after being victims of violence.
- D. Some teenagers watched violent television programs alone, while others did so in groups.
- E. Many of the teenagers in the first group exhibited aggressive behavior before the study began.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Updated.

QUESTION 243

Because of a recent drought in Florida during the orange-growing season, the price of oranges this season will be three times the usual price. This will drive up the cost of producing orange juice and thus push up the price of orange juice for the consumer.

Which of the following, if true, most seriously weakens the argument above?

- A. The recent drought was not as severe as scientists predicted.
- B. States other than Florida also supply oranges to orange juice manufacturers.
- C. Other ingredients are used in the production of orange juice.
- D. Last year the price of oranges was actually lower than the average price over the past ten years.
- E. The price of oranges will eventually be \$0.48 per crate.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 244

Local phone companies have monopolies on phone service within their areas. Cable television can be transmitted via the wires that are already in place and owned by the phone companies. Cable television companies argue that if the telephone companies were to offer cable service, these telephone companies would have an unfair advantage, because their cable transmissions could be subsidized by the profits of their monopolies on phone service.

Which of the following, if true, would ease the cable companies' fear of unfair competition?

- A. In order to use existing telephone wire, telephone companies would need to modernize their operations, a process so expensive it would virtually wipe out all profit from their monopoly for the foreseeable future.
- B. If a phone company were to offer cable service within a particular area, it would have a monopoly within that area.
- C. The cost of television service, whether provided by cable or telephone companies, scales; that is, the total cost of transmission rises only marginally as more homes are added to the network.
- D. Cable programming that offers more channels is already available through satellite dish, but the initial cost of the dish is extremely high.
- E. Cable television will never be able to compete with the burgeoning video rental industry, especially as more homes now have video cassette recorders than ever did before.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 245

Local phone companies have monopolies on phone service within their areas. Cable television can be transmitted via the wires that are already in place and owned by the phone companies. Cable television companies argue that if the telephone companies were to offer cable service, these telephone companies would have an unfair advantage, because their cable transmissions could be subsidized by the profits of their monopolies on phone service. On the basis of the information provided in the passage above, which of the following questions can be answered?

- A. Are phone companies as efficient as cable companies in providing reliable and inexpensive service?
- B. If phone companies were allowed to provide cable service, would they want to do so?
- C. Do the cable companies believe that the local phone companies make a profit on phone service?
- D. Are local phone companies forbidden to offer cable service?
- E. Is it expected that phone companies will have a monopoly on cable service?

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 246

In the past year, there has been a large drop in the number of new cars sold, due to harsh economic conditions in the marketplace and high taxes. At the same time, the average price paid for a new car has risen dramatically.

Which of the following, if true, best explains the increase in the average price of a new car?

- A. The price of used cars has climbed steadily over the past ten years.
- B. There will be a tax reduction later in the year which is expected to aid moderate and low income families.
- C. The market for expensive car has been unaffected by the current economic conditions.
- D. Economic conditions are expected to get significantly worse before the end of the year.
- E. Low demand for trucks and vans has led to lower production in the factories.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 247

Critics of sales seminars run by outside consultants point out that since 1987, revenues of vacuum cleaner companies whose employees attended consultant-led seminars were lower than revenues of vacuum cleaner companies whose employees did not attend such seminars. The critics charge that for vacuum cleaner companies, the sales seminars are ill conceived and a waste of money. Which of the following, if true, is the most effective challenge to the critics of sales seminars?

- A. Those vacuum cleaner companies whose sales were highest prior to 1987 are the only companies that did not send employees to the seminars.
- B. Vacuum cleaner companies that have sent employees to sales seminars since 1987 experienced a greater drop in sales than they had prior to 1987.

- C. The cost of vacuum cleaner sales seminars run by outside consultants has risen dramatically since 1987.
- D. The poor design of vacuum cleaner sales seminars is not the only reason for their ineffectiveness.
- E. Since 1987, sales of vacuum cleaners have risen twenty percent.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 248

Informed people generally assimilate information from several divergent sources before coming to an opinion. However, most popular news organizations view foreign affairs solely through the eyes of our State Department. In reporting the political crisis in foreign country B, news organizations must endeavor to find alternative sources of information.

Which of the following inferences can be drawn from the argument above?

- A. To the degree that a news source gives an account of another country that mirrors that of our State Department, that reporting is suspect.
- B. To protect their integrity, news media should avoid the influence of State Department releases in their coverage of foreign affairs.
- C. Reporting that is not influenced by the State Department is usually more accurate than are other accounts.
- D. The alternative sources of information mentioned in the passage would probably not share the same views as the State Department.
- E. A report cannot be seen as influenced by the State Department if it accurately depicts the events in a foreign country.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 249

A light bulb company produces 2,000 light bulbs per week. The manager wants to ensure that standards of quality remain constant from week to week. The manager, therefore, claims that out of 2,000 light bulbs produced per week, 500 light bulbs are rejected. Of the following, the best criticism of the manager's plan is that the plan assumes that

- A. light bulb manufacturers cannot accept all light bulbs that produced
- B. the overall quality of the light bulbs would not be improved if the total number of light bulbs produced were reduced
- C. each light bulb that is reviewed is worthy of being reviewed
- D. it is difficult to judge the quality of a light bulb
- E. the 1,500 light bulbs that are accepted will be of the same quality from week to week

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 250

For over fifty years, the ocean-freight industry worked to make ocean freighters faster and to lower their fuel consumption. Despite considerable success, the economics of the industry grew worse, until the industry was almost dead. What was wrong was an incongruity between assumptions and realities. The real costs came, not from time spent at sea, but from time spent in port during loading and unloading. Which of the following actions would be most likely to lead to a solution of the problem faced by the ocean-freight industry, as it is analyzed in the passage?

- A. Developing a ship's engine that runs on a cheaper type of fuel than that traditionally used by ocean freighters
- B. Developing a ship with accessible cargo compartments that can be mechanically loaded and unloaded very rapidly
- C. Developing a ship whose freight capacity relative to the ship's total volume is much larger than that of any existing ship
- D. Implementing a system to ensure that ocean freighters are loaded to capacity whenever they leave a port
- E. Implementing a marketing plan that focuses on routes that are known to be least threatened by unfavorable weather, thus permitting rapid trips and reliable arrival times

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 251

The increased concentration of salt in the bay, which is the result of recent drought and high temperatures, will cause many fish to die. Shrimp, however, can tolerate high salt levels; the shrimp industry will not, therefore, be hurt by the increased concentration of salt. Which of the following statements, if true, would weaken the argument above?

- A. Some fish will migrate to areas that have lower concentrations of salt.
- B. Lack of rainfall for extended periods of time lowers the water level of bays.
- C. The organisms on which young shrimp feed cannot survive in such salty waters.
- D. Increased water temperature often causes shrimp to multiply more quickly.
- E. Shrimp are more abundant in areas of the bay that are sparsely populated by fish.

Correct Answer: C

Section: Critical Reasoning Questions**Explanation****Explanation/Reference:****QUESTION 252**

Currently people in the United States eat, on the average, 1,431 pounds of food per year, 35 pounds more than in 1980. This increase is, at least in part, because people between the ages of 15 and 64 have accounted for an increasing share of the population.

Which of the following can be properly inferred from the passage above?

- A. More than half of the current population of the United States is between the ages of 15 and 64.
- B. The population has risen since 1980.
- C. Children below the age of 15 require, on the average, more food than do people over the age of 64.
- D. Before 1980 children below the age of 15 outnumbered people between the ages of 15 and 64.
- E. Individuals between the ages of 15 and 64 consume, on the average, more food than do those younger or older.

Correct Answer: E

Section: Critical Reasoning Questions**Explanation****Explanation/Reference:****QUESTION 253**

Each increase of 1 percent in real disposable personal income per capita will increase the share of the electorate for an incumbent by about 2.2 percentage points, other things being equal. Since 1952 there has been a decline in real disposable income during only one presidential election year. The incumbent lost that election.

Which of the following conclusions can be properly drawn from the statements above?

- A. When an incumbent runs for office, he or she is likely to win.
- B. Political parties should take care to put forth a candidate who seems prosperous.
- C. Presidential candidates should put their greatest efforts into improving their public image.
- D. Because a presidential campaign requires the expenditure of large amounts of money, it frequently impoverishes a candidate and his or her supporters.
- E. The outcome of a presidential election is substantially affected by factors other than the ideological positions of the candidates.

Correct Answer: E

Section: Critical Reasoning Questions**Explanation**

Explanation/Reference:**QUESTION 254**

According to an independent computer-industry analyst, the new Regent microcomputer is of high quality, is fast, and costs less than any currently existing competing model. It is reasonable to conclude, therefore, as the manufacturer's prospectus does, that the Regent will quickly establish itself as a fast-selling, low-priced alternative to currently available microcomputers. Which of the following, if true, would LEAST weaken the argument above?

- A. Many retailers already carry one or more low-priced microcomputer models and are disinclined to carry another.
- B. Several faster and lower-priced models of microcomputers will soon be introduced by other computer manufacturers.
- C. The Regent Corporation's microcomputer can be used in conjunction with higher-priced microcomputers manufactured by other companies.
- D. Most of those individuals and companies that could be expected to make up the potential market for the Regent microcomputer have already filled their microcomputer needs.
- E. The independent computer-industry analyst whose assessment was incorporated in the prospectus has used measures of quality that are not universally accepted by the computer-buying public.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:**QUESTION 255**

Which of the following is the most logical completion of the passage below? Many companies have been pushing for a three-week extension of daylight saving time, which would mean that the sun would continue to set an hour later during the fall months. The owners of a chain of convenience stores, for example, expect to gain \$15 million a year in additional sales, mostly from people who tend to_____

- A. stay away from these stores after dark
- B. stay outdoors during the fall months
- C. spend more money in the fall
- D. spend less money in the fall
- E. shop at these stores when they are pressed for time

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 256

Recent evidence appears to contradict earlier findings that suggested that those who are physically fit cope better with stressful real-life events. Of a group of healthy women, those randomly assigned to a ten-week program of aerobic exercises performed no better in laboratory tests simulating stressful situations than did the subgroup assigned to a program without exercise. Which of the following, if true, provides evidence for determining whether physical fitness makes one react better to stress?

- A. Superior reaction to laboratory stress situations was found to be more prevalent among women than among men.
- B. Healthy men, after training six months in weight lifting, encountered fewer potentially stressful situations in the subsequent six months.
- C. Subjects following a regimen during which they perfected their skills in a variety of relaxation techniques found that their lives seemed calmer after they began the regimen.
- D. College students with previous high levels of stressful life events showed a markedly reduced reaction to such events after training in aerobics for six months.
- E. Subjects with a high level of self-esteem more often engaged in physical-fitness regimens than did a control group of subjects with average levels of self-esteem.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 257

Now is an excellent time to invest in the catering business. A survey conducted by Weddings magazine found that 70 percent of the magazine's readers want a catered wedding reception. An analysis of the catering industry, however, shows that the current number of caterers can serve only 55 percent of the weddings likely to occur each year.

Which of the following, if true, reveals a weakness in the evidence cited above?

- A. Catering is a highly labor-intensive business.
- B. Caterers are not evenly distributed across the country.
- C. The number of weddings with catered receptions has been growing each year for the past five years.
- D. Readers of Weddings magazine are more likely than most people to want a catered reception.
- E. Weddings magazine includes both articles about catered receptions and articles about preparing food oneself for one's wedding reception.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 258

Now is an excellent time to invest in the catering business. A survey conducted by Weddings magazine found that 70 percent of the magazine's readers want a catered wedding reception. An analysis of the catering industry, however, shows that the current number of caterers can serve only 55 percent of the weddings likely to occur each year.

Which of the following, if true, would undermine the validity of the investment advice in the paragraph above?

- A. The average wedding reception involves between 50 and 100 guests.
- B. Approximately a quarter of all weddings take place without a reception.
- C. Approximately a quarter of all weddings and their associated receptions are paid for by the couples themselves.
- D. Only half of all catered wedding receptions include sit-down meals.
- E. Only half of those who say they want a catered wedding reception actually have one.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 259

The Commerce Department recently put limits on machine-tool imports from two countries whose exports of machine tools into the United States have been substantial. As a result of these restrictions, analysts predict that domestic sales of machine tools manufactured in the United States are bound to rise considerably, starting in the very near future.

Which of the following, if true, would be most likely to cause the analysts' prediction to be inaccurate?

- A. A new tax bill that, if passed, would discourage investment in capital equipment such as machine tools is being studied and debated seriously in the United States Congress.
- B. United States companies' orders for metal-cutting machines, which account for 75 percent of sales by the machine-tool industry, rose faster than orders for other types of machine tools during the past year.
- C. Worldwide orders for machine tools made in the United States dropped by more than 10 percent during the past year.
- D. Substantial inventories of foreign-made machine tools were stockpiled in the United States during the past year.
- E. Companies in the industrial sectors of many countries showed a significantly expanded demand for machine tools during the past year.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 260

The cities with the densest population have the highest ratio of police officers to citizens. Such cities also have the lowest rates of property crime without contact between perpetrator and victim. Thus maintaining a high ratio of police officers to citizens can serve as an effective deterrent to at least certain kinds of property crime.

Which of the following, if true, most seriously weakens the argument above?

- A. The quality of training that police receive varies from city to city.
- B. High population density itself makes it difficult to commit a property crime that involves no contact between perpetrator and victim.
- C. Many nonviolent crimes in large cities are drug-related.
- D. A majority of the perpetrators of property crimes in densely populated cities are not apprehended by the police.
- E. Property crimes without contact between perpetrator and victim represent only a small proportion of overall crime.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 261

Approximately two hundred brands of personal computers are being manufactured, but we currently limit our inventory to only the eight most popular brands. We plan to increase greatly the number of computers we sell by expanding our inventory to include the ten best-selling brands. Which of the following, if true, points out a major weakness of the plan above?

- A. The capabilities of three most popular personal computers add to be approximately equivalent, with no brand having consistent superiority in all respects.
- B. The seven most popular brands of personal computers account for almost all computers sold.
- C. As the users of personal computers become more sophisticated, they are more willing to buy less well-known brands of computers.
- D. Less popular brands of computers often provide less profit to the retailer because prices must be discounted to attract customers.
- E. The leading brand of personal computer has been losing sales to less popular brands that offer similar capabilities for less money.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 262

Of those person who became teachers in 1968 and who later left the profession, 30 percent today earn salaries above \$35,000 a year: of those who became teachers in 1968 and have remained in the profession, only 15 percent today earn salaries above \$35,000 a year. These figures indicate how underpaid teachers are today.

The argument above depends on which of the following assumptions about the persons for whom statistics are cited?

- A. At least one-third of the group of persons who have remained in teaching would today be earning more than \$35,000 a year if they had left teaching.
- B. The group of persons who left teaching and the group who did not are comparable in terms of factors that determine how much people outside the teaching profession are paid.
- C. Most of those persons who left teaching did so entirely because of the low salaries teachers earn.
- D. As a group, those persons who have remained in teaching are abler and more dedicated than the group of persons who left teaching.
- E. The group of persons who left teaching and who today earn more than \$35,000 a year were more capable teachers than the group who remained in the profession.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 263

Some analysts maintain that an embargo by country Litora on the export of a strategic metal to country Zenda, if imposed, would drive up the price of the metal in Zenda at least tenfold. They note that few other countries export the metal and that, with an embargo, Zenda might have to depend on as-yet-unexploited domestic sources of the metal.

Which of the following, if true, constitutes the most serious objection to the analysis above?

- A. Litora's economy depends heavily on foreign currency earned by the export of the strategic metal to other countries.
- B. There are foreign-policy steps that Zenda could take to appease Litora and avoid being subjected to an embargo on the metal.
- C. Geologists believe that additional deposits of the metal could possibly be found within the territory of Litora.
- D. Only a small proportion of Zenda's import expenditures is devoted to the import of the metal from Litora.
- E. In case of an embargo, Zenda could buy the metal indirectly from Litora on the world market at a less than one-third increase in cost.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 264

The government should stop permitting tobacco companies to subtract advertising expenses from their revenues in calculating taxable income. Tobacco companies would then have to pay more taxes. As a consequence, they would raise the prices of their products and this price increase would raise the prices of their products and this price increase would discourage tobacco use. Which of the following is an additional premise required by the argument above?

- A. Tobacco companies would not offset the payment of extra taxes by reducing costs in other areas.
- B. Tobacco companies would not continue to advertise if they were forced to pay higher taxes.
- C. People would not continue to buy tobacco products if these products were no longer advertised.
- D. The money the government would gain as a result of the increase in tobacco companies' taxable income would be used to educate the public about the dangers of tobacco use.
- E. The increase in taxes paid by tobacco companies would be equal to the additional income generated by raising prices.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 265

Instead of blaming an airline accident on pilot error, investigators should find out why the error was made by analyzing airplane design, airline management, and pilot-training programs. For only then can changes be made to ensure that the same type of error does not recur and cause another accident.

Which of the following is a presupposition of the argument above?

- A. Pilot error is not a contributing factor in most airline accidents.
- B. Airline companies themselves should be the agents who investigate airline accidents.
- C. Stricter government regulation of airline companies will make air travel significantly safer.
- D. Investigators of airline accidents should contribute to the prevention of future accidents.
- E. Most pilots who make errors in flying will repeat their errors unless they are retrained.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 266

Professor A: We must make a strong moral statement against Country X's policies. Only total divestment--the sale of all stock in companies that have factories or business offices in X--can do this.

Therefore, the university should divest totally.

Professor B: Our aim should be to encourage X to change its policies. Partial divestment is the best way to achieve this aim. Therefore, the university should sell its stock only in companies that either sell goods to X's government, or do the majority of their business in X, or treat their workers in X

unfairly. Professor A's and Professor B's arguments differ in which of the following ways?

- A. They state the same goal but propose different ways of achieving it.
- B. They state different goals but propose the same way of achieving them.
- C. They state different goals and propose different ways of achieving them.
- D. They disagree about whether the university should sell any stock at all.
- E. They disagree about whether X's policies are objectionable.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 267

Professor A: We must make a strong moral statement against Country X's policies. Only total divestment--the sale of all stock in companies that have factories or business offices in X--can do this.

Therefore, the university should divest totally.

Professor B: Our aim should be to encourage X to change its policies. Partial divestment is the best way to achieve this aim. Therefore, the university should sell its stock only in companies that either sell goods to X's government, or do the majority of their business in X, or treat their workers in X unfairly.

Which of the following, if true, would be evidence that the university would not be harmed economically if it followed Professor A's recommendation.

- A. Very few of the companies in which the university owns stocks sell goods to X's government.
- B. Most companies that have factories or business offices in X and in which the university owns stock actually do little of their business in X.
- C. Some companies that have factories or business offices in X and in which the university owns stock have instituted fair treatment policies for their workers in X at very little additional cost to the companies.
- D. The expected financial return to the university from stocks that the university could own under a policy of total divestment is approximately the same as the expected financial return from the same as the expected financial.
- E. If the university sold large blocks of stock under a policy of total divestment, the prices of the stocks of the companies whose stocks were sold would probably decrease somewhat.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 268

In an effort to go beyond resumes as tools in its search for executives, one leading company has resorted to interviewing the top candidates for a position all together in a single group. This technique is supposed to afford a direct comparison of the candidates with respect to some personal qualities that cannot be gleaned from a resume.

Which of the following, if true, casts the most serious doubt on the value of the simultaneous interview technique?

- A. Resumes do sometimes allow reliable inferences to be made about a candidate's personal qualities.
- B. The simultaneous interview could become cumbersome if there were a great many candidates for a position.
- C. The more perceptive the interviewer, the more revealing the simultaneous interview is apt to be.
- D. There are certain personal qualities that only an extended simultaneous interview can bring out.
- E. The simultaneous interview distorts each candidate's response style by inducing stresses unlike any an executive position induces.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 269

The Asian American History Association receives approximately 1,000 proposals each year from individuals who wish to present papers at its annual meeting. The association's officers would like to ensure constant standards of quality in the presentations from year to year. The officers have therefore decided to accept for presentation each year only the best 300 papers selected on the basis of the quality of the proposals submitted.

Of the following, the best criticism of the officers' plan is that the plan assumes that

- A. Professional associations cannot accept all papers submitted for presentation at their annual meetings.
- B. The total number of proposals submitted to the association will remain at approximately 1,000 in future years.
- C. Each proposal submitted to the association deserves to be considered a serious candidate for presentation.
- D. It is difficult to judge the quality of a paper on the basis of the proposal alone.
- E. The best 300 papers submitted to the association for presentation will be of the same quality from year to year.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 270

Two groups of laboratory mice were injected with cancerous cells. One group's cages were rotated in a disorienting manner. Two-thirds of these mice developed cancers. One-tenth of the mice in stationary cages developed cancers. The researchers concluded that stress enhances the development of

cancer in laboratory mice.

The researchers' conclusion logically depends on which of the following assumptions?

- A. Rotating the cages in disorienting manner produced stress in the mice in those cages.
- B. The injections given to the two groups of mice were not of equal strength.
- C. Injecting the mice with cancerous cells caused stress in the mice.
- D. Even without the injections the mice in the rotated cages would have developed cancers.
- E. Even the rotation of cages in a manner that is not disorienting is likely to produce stress in mice in those cages.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 271

In 1846 about 80 percent of the towns in New York State banned the sale of alcoholic beverages. A recent article about the bans concludes that mid-nineteenth-century supporters of the temperance movement were not residents of remote rural areas, as has often been asserted; rather, they were concentrated in centers of economic opportunity.

Which of the following, if true, best supports the conclusion reached in the article?

- A. After 1846 the temperance movement grew rapidly and it flourished until the turn of the century.
- B. Support for the ban on alcohol was strongest in New York towns where the economy was based on new, growing industries.
- C. Many young New York State farmers supported the ban on alcohol.
- D. The most adamant opponents of the ban included several affluent factory and mill owners.
- E. In New York City, which was a commercial center in 1846, the sale of alcoholic beverages was not banned.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 272

In 1984 Exco, which sells its products only through mail-order catalogs, began distributing its catalog to people who had never purchased Exco's products, while it continued to distribute the catalog to previous customers. Total dollar sales increased in 1984, but Exco's profits that year were smaller than in 1983.

Which of the following, if true, contributes most to an explanation of Exco's smaller profits in 1984, as compared to 1983?

- A. There was a two percent increase in 1984 in the sales tax that consumers had to pay on all purchases from the catalog.
- B. A greater number of catalogs were sent to previous customers than to people who never purchased products from Exco.
- C. In 1984 Exco's product-manufacturing costs increased by a smaller amount than the products' selling prices increased.
- D. Customers who never previously purchased products from Exco purchased, on the average, fewer products in 1984 than did previous customers.
- E. The increase between 1983 and 1984 in the cost of mailing the catalogs was greater than the increase in sales from 1983 to 1984.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 273

People living in the undeveloped wilderness area want jobs, and commercial development of the area will create jobs. But if the new commercial development plan is carried out, the wilderness will suffer. Thus the board considering the area's future must choose between the preservation of the wilderness and the wishes of the local people.

The answer to which of the following questions would be LEAST relevant to evaluating whether the board indeed faces the choice the author says it faces?

- A. Could commercial development be carried out under an alternative plan without damaging the wilderness?
- B. Would commercial development of the wilderness area significantly benefit people living elsewhere?
- C. Would the jobs created by the new development plan be filled by the local people?
- D. Do local people support or oppose commercial development of the wilderness area?
- E. Can job be provided without commercial development of the wilderness area?

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 274

The lobbyists argued that because there is no statistical evidence that breathing other people's tobacco smoke increases the incidence of heart disease or lung cancer in healthy nonsmokers, legislation banning smoking in workplaces cannot be justified on health grounds. The argument reported above would be most seriously weakened if it were true that

- A. Breathing smoke-filled air increase the incidence of headaches and coughs in healthy nonsmokers.
- B. Most nonsmokers dislike the odor of smoke-filled air.

- C. Smoke-filled air is a major source of the dirt that damages computers and other sensitive equipment.
- D. Most workers would prefer to have smoking banned in workplaces.
- E. Legislation banning smoking in workplaces decreases friction between smoking and nonsmoking workers and is easy to enforce.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 275

The lobbyists argued that because there is no statistical evidence that breathing other people's tobacco smoke increases the incidence of heart disease or lung cancer in healthy nonsmokers, legislation banning smoking in workplaces cannot be justified on health grounds.

Of the following, which is the best criticism of the argument reported above?

- A. It ignores causes of lung cancer other than smoking.
- B. It neglects the damaging effects of smoke-filled air on nonsmokers who are not healthy.
- C. It fails to mention the roles played by diet, exercise, and heredity in the development of heart disease.
- D. It does not consider the possibility that nonsmokers who breathe smoke-filled air at work may become more concerned about their health.
- E. It does not acknowledge that nonsmokers, even those who breathe smoke-filled air at work, are in general healthier than smokers.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 276

Which of the following best completes the passage below?

When a project is failing and should be terminated, plan to bring in a new manager. New managers are more likely to terminate the project than are the original managers because_____

- A. the project may have failed for reasons that the original manager could not have foreseen
- B. organizations tend to reward managers who can overcome problems
- C. managerial decisions to terminate a project should depend on the likelihood of the project's eventual success
- D. the original managers were not necessarily able to overcome problems caused by external events over which they had no control

E. the new managers have no need to justify the earlier decision to maintain the project

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 277

State X's income-averaging law allows a portion of one's income to be taxed at lower rate than the rate based on one's total taxable income. To use income averaging, the taxpayer must have earned taxable income for a particular year that exceeds 140 percent of his or her average taxable income for the previous three years. People using income averaging owe less tax for that year than they would without income averaging.

Which of the following individuals would be most seriously affected if income averaging were not permitted in computing the taxes owed for current year?

- A. Individuals whose income has steadily decreased for the past three years
- B. Individuals whose income increased by 50 percent four years ago and has remained the same since then
- C. Individuals whose income has doubled this year after remaining about the same for five years
- D. Individuals who had no income this year, but did in each of the previous three years
- E. Individuals who are retired and whose income has remained about the same for the past ten years

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 278

According to a recent study, fifteen corporations in the United States that follow a credo of social responsibility are also very profitable. Because of their credos, these fifteen corporations give generously to charity, follow stringent environmental-protection policies, and have vigorous affirmative-action programs.

Which of the following can be correctly inferred from the statements above?

- A. Following a credo of social responsibility helps to make a corporation very profitable.
- B. It is possible for a corporation that follows a credo of social responsibility to be very profitable.
- C. A corporation that gives generously to charity must be doing so because of its credo of social responsibility.
- D. Corporations that are very profitable tend to give generously to charity.
- E. Corporations that have vigorous affirmative-action programs also tend to follow stringent environmental-protection policies.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 279

A year after the start an experiment to decrease crime in two high-crime subway stations by the installation of closed-circuit televisions, the experiment is being discontinued, city officials say the program has led to an increase in crime, citing the fact that following the installation, both stations showed increases in the number of crimes reported.

Which of the following, if true, most seriously weakens the claim of the city officials that the program has led to an increase in crime?

- A. The two subway stations had been chosen on the basis subway stations was higher than that of other high-crime subway stations not equipped with closed-circuit-television.
- B. The rate of increase in crimes reported for two subway stations was higher than that of other high- crime subway stations not equipped with closed-circuit television.
- C. The percentage of all crimes committed at the two subway stations that were reported rose as a result of increased instances of observations of crime on the closed-circuit televisions.
- D. The year in which the experiment was conducted was a year in which the total number of crimes reported in the city fell.
- E. Closed-circuit televisions installed in shops and stores throughout the city have proved to be useful in the prevention of shoplifting and burglaries.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 280

A government agency that reimburses its clients for bills they have paid for medical care has had this year's budget cut. To save money without cutting reimbursements or otherwise harming clients financially, it plans to delay reimbursements to clients for forty days, thereby earning \$180 million per year in interest on the reimbursement money.

Which of the following, if true, is the best criticism of the agency's plan?

- A. Hospitals and physicians typically hold patients responsible for the ultimate payment of their bills.
- B. The agency cannot save money by cutting staff because it is already understaffed.
- C. Some clients borrow money to pay their medical bills; they will pay forty extra days of interest on these loans.
- D. Some clients pay their medical bills immediately, but they often take more than forty days to file with the agency for reimbursement.
- E. The agency's budget was cut by more than \$180 million last year.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 281

Record companies defend their substitution of laser-read compact discs (CD's) for the much less expensive traditional long-playing vinyl records in their catalogs by claiming that the audio market is ruled by consumer demand for ever-improved sound reproduction rather than by record manufacturers' profit-motivated marketing decisions. But this claim cannot be true, because if it were true, then digital audiotape, which produces even better sound than CD's, would be commercially available from these same record companies, but it is not.

Which of the following, if true, best explains how the record companies' claim about the nature of the audio reproduction market could be true and digital audiotape nevertheless be unavailable for the commercial market?

- A. Most consumers prefer audiotape to long-playing records or CD's because of the tape's durability and compactness.
- B. Prototypes of digital audiotape have been used to make master tapes of some performances in recording studios.
- C. The manufacturing technology that underlies the commercial production of CD's requires equipment very similar to that needed for commercial production of digital audiotape.
- D. Record companies have not yet solved several quality-control problems that have beset attempts to produce digital audiotape in commercial quantities.
- E. CD's are more expensive than long-playing vinyl records by about the same ratio as digital audiotape cassettes would be more expensive than conventional cassettes.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 282

Record companies defend their substitution of laser-read compact discs (CD's) for the much less expensive traditional long-playing vinyl records in their catalogs by claiming that the audio market is ruled by consumer demand for ever-improved sound reproduction rather than by record manufacturers' profit-motivated marketing decisions. But this claim cannot be true, because if it were true, then digital audiotape, which produces even better sound than CD's, would be commercially available from these same record companies, but it is not.

Which of the following, if true, would most strengthen the argument against the record companies' claim?

- A. When CD's were first introduced in the audio-reproduction market, prices were high and selection was poor.
- B. Record companies are reluctant to attempt commercial production of digital audiotape until profits from the sales of CD's have enabled them to

recover their investments in compact-disc manufacturing technology.

- C. Some CD's have been so much in demand that consumers have experienced long delays in obtaining copies.
- D. Because CD's work according to principles very different from those that govern conventional recordings, commercial production of CD's requires new kinds of manufacturing technology.
- E. Any valid comparison of CD audio reproductions to digital audiotape reproductions must be based on identical performances played back on the highest quality disc or tape player.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 283

The president of a consulting firm analyzed the decisions made about marketing by her clients and concluded that the decisions were correct only about half of the time.

The conclusion above depends on the presupposition that

- A. companies can be successful even when about half of the decisions they make about marketing prove to be wrong
- B. companies hiring her consulting firm make no more incorrect marketing decisions than do companies in general
- C. executives consistently making correct marketing decisions rarely enlist the aid of a consulting firm
- D. marketing decision are just as likely to be correct as they are to be incorrect
- E. it is possible to classify a marketing decision properly as being either right or wrong

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 284

It is true that unionized women earn, on average, more than a third more than non unionized women do. But the unionized women work in industries where wages happen to be high, their non unionized counterparts in these industries earn about as much as they do. Therefore unionization does not raise women's wages.

Which of the following, if true, most seriously weakens the argument above?

- A. Besides wage increases, unions bargain for benefits such as medical insurance and workplace safety.
- B. The most highly paid women are in executive positions, which are not unionized.

- C. Wages in many industries vary from one part of the country to another, regardless of whether workers are unionized or not.
- D. Non unionized women in an industry often receive income increases as a result of increases won by unions representing women who work for other employers in the same industry.
- E. The unionization of women who work for one employer in a given industry frequently prompts the unionization of women who work for other employers in the same industry.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 285

A violin constructed to have improved sound would sound different from the best-sounding existing violins.

To professional violinists, a violin that sounds different from the best-sounding existing violins sounds less like a violin and therefore worse than the best-sounding existing violins. Professional violinists are the only accepted judges of the sound quality of violins.

Would be the best supported by those statements?

- A. Only amateur violinists should be asked to judge the sound quality of newly constructed violins.
- B. Professional violinists supervise the construction of violins.
- C. The best-sounding existing violins have been in existence for several centuries.
- D. It is currently impossible to construct a violin that the only accepted judges will evaluate as having improved sound.
- E. It is possible to construct a violin that sounds better than the best-sounding existing violins to everyone but professional violinists.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 286

The fact that several of the largest senior citizens' organizations are constituted almost exclusively of middle-class elderly people has led critics to question the seriousness of those organizations' commitment to speaking out on behalf of the needs of economically disadvantaged elderly people.

Which of the following generalizations, if true, would help to substantiate the criticism implicit in the statement above?

- A. The ideology of an organization tends to reflect the traditional political climate of its locale.
- B. The needs of disadvantaged elderly people differ in some ways from those of other disadvantaged groups within contemporary society.
- C. Organized groups are better able to publicize their problems and seek redress than individuals acting alone.

- D. Middle-class elderly people are more likely to join organizations than are economically disadvantaged elderly people.
- E. People usually join organizations whose purpose is to further the economic, political, or social interests of their members.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 287

Corporate Officer: Last year was an unusually poor one for our chemical division, which has traditionally contributed about 60 percent of the corporation's profits. It is therefore encouraging that there is the following evidence that the pharmaceutical division is growing stronger: it contributed 45 percent of the corporation's profits, up from 20 percent the previous year. On the basis of the facts stated, which of the following is the best critique of the evidence presented above?

- A. The increase in the pharmaceutical division's contribution to corporation profits could have resulted largely from the introduction of single, important new product.
- B. In multidivisional corporations that have pharmaceutical divisions, over half of the corporation's profits usually come from the pharmaceuticals.
- C. The percentage of the corporation's profits attributable to the pharmaceutical division could have increased even if that division's performance had not improved.
- D. The information cited does not make it possible to determine whether the 20 percent share of profits cited was itself an improvement over the year before.
- E. The information cited does not make it possible to compare the performance of the chemical and pharmaceutical divisions in of the percent of total profits attributable to each.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 288

Identical twins tend to have similar personalities; if environment outweighs heredity in personality development, twins raised together should presumably have more similar personalities than those raised apart. A recent study of identical twins in both situations measured 11 key traits through a questionnaire, and concluded that 7 of the 11 are primarily products of heredity. Which of the following, if established, would cast the most doubt on the study's results?

- A. Fewer than half of the pairs of twins studied were raised separately.
- B. The ages of all of the twins studied fell within a 10-year range.

- C. Some of the traits that the study attributed to heredity developed in the separately raised twins because those pairs all grew up in similar families.
- D. Although over half the traits measured were determined to be linked to heredity, the nature of those traits varied widely.
- E. The 11 traits that were measured constitute a representative sample of larger, generally accepted pool of key personality traits.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 289

When people predict that certain result will not take place unless a certain action is taken, they believe that they have learned that the prediction is correct when the action is taken and the result occurs. On reflection, however, it often becomes clear that the result admits of more than one interpretation. Which of the following, if true, best supports the claims above?

- A. Judging the success of an action requires specifying the goal of the action.
- B. Judging which action to take after a prediction is made requires knowing about other actions that have been successful in similar past situations.
- C. Learning whether a certain predictive strategy is good requires knowing the result using that strategy through several trials.
- D. Distinguishing a correct prediction and effective action from an incorrect prediction and ineffective action is often impossible.
- E. Making a successful prediction requires knowing the facts about the context of that prediction.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 290

Nearly one in three subscribers to Financial Forecaster is a millionaire, and over half are in top management. Shouldn't you subscribe to Financial Forecaster now? A reader who is neither a millionaire nor in top management would be most likely to act in accordance with the advertisement's suggestion if he or she drew which of the following questionable conclusions invited by the advertisement?

- A. Among finance-related periodicals. Financial Forecaster provides the most detailed financial information.
- B. Top managers cannot do their jobs properly without reading Financial Forecaster.
- C. The advertisement is placed where those who will be likely to read it are millionaires.
- D. The subscribers mentioned were helped to become millionaires or join top management by reading Financial Forecaster.
- E. Only those who will in fact become millionaires, or at least top managers, will read the advertisement.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 291

Contrary to the charges made by some of its opponents, the provisions of the new deficit-reduction law for indiscriminate cuts in the federal budget are justified. Opponents should remember that the New Deal pulled this country out of great economic troubles even though some of its programs were later found to be unconstitutional.

The author's method of attacking the charges of certain opponents of the new deficit-reduction law is to

- A. attack the character of the opponents rather than their claim
- B. imply an analogy between the law and some New Deal programs
- C. point out that the opponents' claims imply a dilemma
- D. show that the opponents' reasoning leads to an absurd conclusion
- E. show that the New Deal also called for indiscriminate cuts in the federal budget

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 292

The opponents could effectively defend their position against the author's strategy by pointing out that

- A. the expertise of those opposing the law is outstanding
- B. the lack of justification for the new law does not imply that those who drew it up were either inept or immoral
- C. the practical application of the new law will not entail indiscriminate budget cuts
- D. economic troubles present at the time of the New Deal were equal in severity to those that have led to the present law
- E. the fact that certain flawed programs or laws have improved the economy does not prove that every such program can do so

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 293

In Millington, a city of 50,000 people, Mercedes Pedrosa, a realtor, calculated that a family with Millington's median family income, \$28,000 a year, could afford to buy Millington's median-priced \$77,000 house. This calculation was based on an 11.2 percent mortgage interest rate and on the realtor's assumption that a family could only afford to pay up to 25 percent of its income for housing. Which of the following corrections of a figure appearing in the passage above, if it were the only correction that needed to be made, would yield a new calculation showing that even incomes below the median family income would enable families in Millington to afford Millington's median-priced house?

- A. Millington's total population was 45,000 people.
- B. Millington's median annual family income was \$27,000.
- C. Millington's median-priced house cost \$80,000.
- D. The rate at which people in Millington had to pay mortgage interest was only 10 percent.
- E. Families in Millington could only afford to pay up to 22 percent of their annual income for housing.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 294

Psychological research indicates that college hockey and football players are more quickly moved to hostility and aggression than are college athletes in no contact sports such as swimming. But the researchers' conclusion--that contact sports encourage and teach participants to be hostile and aggressive--is untenable. The football and hockey players were probably more hostile and aggressive to start with than the swimmers. Which of the following, if true, would most strengthen the conclusion drawn by the psychological researchers?

- A. The football and hockey players became more hostile and aggressive during the season and remained so during the off-season, whereas there was no increase in aggressiveness among the swimmers.
- B. The football and hockey players, but not the swimmers, were aware at the start of the experiment that they were being tested for aggressiveness.
- C. The same psychological research indicated that the football and hockey players had a great respect for cooperation and team play, whereas the swimmers were most concerned with excelling as individual competitors.
- D. The research studies were designed to include no college athletes who participated in both contact and noncontact sports.
- E. Throughout the United States, more incidents of fan violence occur at baseball games than occur at hockey or football games.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 295

Ross: The profitability of Company X, restored to private ownership five years ago, is clear evidence that businesses will always fare better under private than under public ownership. Julia: Wrong. A close look at the records shows that X has been profitable since the appointment of a first-class manager, which happened while X was still in the public sector. Which of the following best describes the weak point in Ross's claim on which Julia's response focuses?

- A. The evidence Ross cites comes from only a single observed case, that of Company X.
- B. The profitability of Company X might be only temporary.
- C. Ross's statement leaves open the possibility that the cause he cites came after the effect he attributes to it.
- D. No mention is made of companies that are partly government owned and partly privately owned.
- E. No exact figures are given for the current profits of Company X.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 296

Stronger patent laws are needed to protect inventions from being pirated. With that protection, manufacturers would be encouraged to invest in the development of new products and technologies. Such investment frequently results in an increase in a manufacturer's productivity. Which of the following conclusions can most properly be drawn from the information above?

- A. Stronger patent laws tend to benefit financial institutions as well as manufacturers.
- B. Increased productivity in manufacturing is likely to be accompanied by the creation of more manufacturing jobs.
- C. Manufacturers will decrease investment in the development of new products and technologies unless there are stronger patent laws.
- D. The weakness of current patent laws has been a cause of economic recession.
- E. Stronger patent laws would stimulate improvements in productivity for many manufacturers.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 297

Which of the following best completes the passage below?

At large amusement parks, live shows are used very deliberately to influence crowd movements. Lunchtime performances relieve the pressure on a park's restaurants. Evening performances have a rather different purpose: to encourage visitors to stay for supper. Behind this surface divergence in immediate purpose there is the unified underlying goal of _____

- A. keeping the lines at the various rides short by drawing off part of the crowd
- B. enhancing revenue by attracting people who come only for the live shows and then leave the park
- C. avoiding as far as possible traffic jams caused by visitors entering or leaving the park
- D. encouraging as many people as possible to come to the park in order to eat at the restaurants
- E. utilizing the restaurants at optimal levels for as much of the day as possible

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 298

James weighs more than Kelly.

Luis weighs more than Mark.

Mark weighs less than Ned.

Kelly and Ned are exactly the same weight.

If the information above is true, which of the following must also be true?

- A. Luis weighs more than Ned.
- B. Luis weighs more than James.
- C. Kelly weighs less than Luis.
- D. James weighs more than Mark.
- E. Kelly weighs less than Mark.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 299

Partly because of bad weather, but also partly because some major pepper growers have switched to high-priced cocoa, world production of pepper has been running well below worldwide sales for three years. Pepper is consequently in relatively short supply. The price of pepper has soared in response: it

now equals that of cocoa.

Which of the following can be inferred from the passage?

- A. Pepper is a profitable crop only if it is grown on a large scale.
- B. World consumption of pepper has been unusually high for three years.
- C. World production of pepper will return to previous levels once normal weather returns.
- D. Surplus stocks of pepper have been reduced in the past three years.
- E. The profits that the growers of pepper have made in the past three years have been unprecedented.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 300

Partly because of bad weather, but also partly because some major pepper growers have switched to high-priced cocoa, world production of pepper has been running well below worldwide sales for three years. Pepper is consequently in relatively short supply. The price of pepper has soared in response: it now equals that of cocoa.

Some observers have concluded that the rise in the price of pepper means that the switch by some growers from pepper to cocoa left those growers no better off than if none of them had switched; this conclusion, however, is unwarranted because it can be inferred to be likely that

- A. those growers could not have foreseen how high the price of pepper would go
- B. the initial cost involved in switching from pepper to cocoa is substantial
- C. supplies of pepper would not be as low as they are if those growers had not switched crops
- D. cocoa crops are as susceptible to being reduced by bad weather as are pepper crops
- E. as more growers turn to growing cocoa, cocoa supplies will increase and the price of cocoa will fall precipitously

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 301

Using computer techniques, researchers analyze layers of paint that lie buried beneath the surface layers of old paintings. They claim, for example, that additional mountainous scenery once appeared in Leonardo da Vinci's Mona Lisa, which was later painted over. Skeptics reply to these claims, however, that X-ray examinations of the Mona Lisa do not show hidden mountains. Which of the following, if true, would tend most to weaken the force of the skeptics' objections?

- A. There is no written or anecdotal record that Leonardo da Vinci ever painted over major areas of his Mona Lisa.
- B. Painters of da Vinci's time commonly created images of mountainous scenery in the backgrounds of portraits like the Mona Lisa.
- C. No one knows for certain what parts of the Mona Lisa may have been painted by da Vinci's assistants rather than by da Vinci himself.
- D. Infrared photography of the Mona Lisa has revealed no trace of hidden mountainous scenery.
- E. Analysis relying on X-rays only has the capacity to detect lead-based white pigments in layers of paint beneath a painting's surface layers.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 302

While Governor Verdant has been in office, the state's budget has increased by an average of 6 percent each year. While the previous governor was in office, the state's budget increased by an average of 11.5 percent each year. Obviously, the austere budgets during Governor Verdant's term have caused the slowdown in the growth in state spending.

Which of the following, if true, would most seriously weaken the conclusion drawn above?

- A. The rate of inflation in the state averaged 10 percent each year during the previous governor's term in office and 3 percent each year during Verdant's term.
- B. Both federal and state income tax rates have been lowered considerably during Verdant's term in office.
- C. In each year of Verdant's term in office, the state's budget has shown some increase in spending over the previous year.
- D. During Verdant's term in office, the state has either discontinued or begun to charge private citizens for numerous services that the state offered free to citizens during the previous governor's term.
- E. During the previous governor's term in office, the state introduced several so-called "austerity" budgets intended to reduce the growth in state spending.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 303

Federal agricultural programs aimed at benefiting one group whose livelihood depends on farming often end up harming another such group.

Which of the following statements provides support for the claim above?

- A. An effort to help feed-grain producers resulted in higher prices for their crops, but the higher prices decreased the profits of livestock producers.
II. In order to reduce crop surpluses and increase prices, growers of certain crops were paid to leave a portion of their land idle, but the reduction was not achieved because improvements in efficiency resulted in higher production on the land in use.
III. Many farm workers were put out of work when a program meant to raise the price of grain provided grain growers with an incentive to reduce production by giving them surplus grain from government reserves.
- B. I, but not II and not III
C. II, but not I and not III
D. I and III, but not II
E. II and III, but not I
F. I, II and III

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 304

Technological education is worsening. People between eighteen and twenty-four, who are just emerging from their formal education, are more likely to be technologically illiterate than somewhat older adults. And yet, issues for public referenda will increasingly involve aspects of technology. Which of the following conclusions can be properly drawn from the statements above?

- A. If all young people are to make informed decisions on public referenda, many of them must learn more about technology.
B. Thorough studies of technological issues and innovations should be made a required part of the public and private school curriculum.
C. It should be suggested that prospective voters attend applied science courses in order to acquire a minimal competency in technical matters.
D. If young people are not to be overly influenced by famous technocrats, they must increase their knowledge of pure science.
E. On public referenda issues, young people tend to confuse real or probable technologies with impossible ideals.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 305

In a political system with only two major parties, the entrance of a third-party candidate into an election race damages the chances of only one of the two major candidates. The third-party candidate always attracts some of the voters who might otherwise have voted for one of the two major candidates, but not voters who support the other candidate. Since a third-party candidacy affects the two major candidates unequally, for reasons neither of them has

any control over, the practice is unfair and should not be allowed.

If the factual information in the passage above is true, which of the following can be most reliably inferred from it?

- A. If the political platform of the third party is a compromise position between that of the two major parties, the third party will draw its voters equally from the two major parties.
- B. If, before the emergence of a third party, voters were divided equally between the two major parties, neither of the major parties is likely to capture much more than one-half of the vote.
- C. A third-party candidate will not capture the votes of new voters who have never voted for candidates of either of the two major parties.
- D. The political stance of a third party will be more radical than that of either of the two major parties.
- E. The founders of a third party are likely to be a coalition consisting of former leaders of the two major parties.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 306

Companies considering new cost-cutting manufacturing processes often compare the projected results of making the investment against the alternative of not making the investment with costs, selling prices, and share of market remaining constant.

Which of the following, assuming that each is a realistic possibility, constitutes the most serious disadvantage for companies of using the method above for evaluating the financial benefit of new manufacturing processes?

- A. The costs of materials required by the new process might not be known with certainty.
- B. In several years interest rates might go down, reducing the interest costs of borrowing money to pay for the investment.
- C. Some cost-cutting processes might require such expensive investments that there would be no net gain for many years, until the investment was paid for by savings in the manufacturing process.
- D. Competitors that do invest in a new process might reduce their selling prices and thus take market share away from companies that do not.
- E. The period of year chosen for averaging out the cost of the investment might be somewhat longer or shorter, thus affecting the result.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 307

There are far fewer children available for adoption than there are people who want to adopt. Two million couples are currently waiting to adopt, but in 1982, the last year for which figures exist, there were only some 50,000 adoptions.

Which of the following statements, if true, most strengthens the author's claim that there are far fewer children available for adoption than there are people who want to adopt?

- A. The number of couples waiting to adopt has increased significantly in the last decade.
- B. The number of adoptions in the current year is greater than the number of adoptions in any preceding year.
- C. The number of adoptions in a year is approximately equal to the number of children available for adoption in that period.
- D. People who seek to adopt children often go through a long process of interviews and investigation by adoption agencies.
- E. People who seek to adopt children generally make very good parents.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 308

Archaeologists seeking the location of a legendary siege and destruction of a city are excavating in several possible places, including a middle and a lower layer of a large mound. The bottom of the middle layer contains some pieces of pottery of type 3, known to be from a later period than the time of the destruction of the city, but the lower layer does not.

Which of the following hypotheses is best supported by the evidence above?

- A. The lower layer contains the remains of the city where the siege took place.
- B. The legend confuses stories from two different historical periods.
- C. The middle layer does not represent the period of the siege.
- D. The siege lasted for a long time before the city was destroyed.
- E. The pottery of type 3 was imported to the city by traders.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 309

Archaeologists seeking the location of a legendary siege and destruction of a city are excavating in several possible places, including a middle and a lower layer of a large mound. The bottom of the middle layer contains some pieces of pottery of type 3, known to be from a later period than the time of the destruction of the city, but the lower layer does not. The force of the evidence cited above is most seriously weakened if which of the following is true?

- A. Gerbils, small animals long native to the area, dig large burrows into which objects can fall when the burrows collapse.
- B. Pottery of types 1 and 2, found in the lower level, was used in the cities from which, according to the legend, the besieging forces came.
- C. Several pieces of stone from a lower-layer wall have been found incorporated into the remains of a building in the middle layer.
- D. Both the middle and the lower layer show evidence of large-scale destruction of habitations by fire.
- E. Bronze ax heads of a type used at the time of the siege were found in the lower level of excavation.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 310

After the national speed limit of 55 miles per hour was imposed in 1974, the number of deaths per mile driven on a highway fell abruptly as a result. Since then, however, the average speed of vehicles on highways has risen, but the number of deaths per mile driven on a highway has continued to fall. Which of the following conclusions can be properly drawn from the statements above?

- A. The speed limit alone is probably not responsible for the continued reduction in highway deaths in the years after 1974.
- B. People have been driving less since 1974.
- C. Driver-education courses have been more effective since 1974 in teaching drivers to drive safely.
- D. In recent years highway patrols have been less effective in catching drivers who speed.
- E. The change in the speed limit cannot be responsible for the abrupt decline in highway deaths in 1974.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 311

Neighboring landholders: Air pollution from the giant aluminum refinery that has been built next to our land is killing our plants.
Company spokesperson: The refinery is not to blame, since our study shows that the damage is due to insects and fungi.
Which of the following, if true, most seriously weakens the conclusion drawn by the company spokesperson?

- A. The study did not measure the quantity of pollutants emitted into the surrounding air by the aluminum refinery.
- B. The neighboring landholders have made no change in the way they take care of their plants.
- C. Air pollution from the refinery has changed the chemical balance in the plants' environment, allowing the harmful insects and fungi to thrive.

- D. Pollutants that are invisible and odorless are emitted into the surrounding air by the refinery.
- E. The various species of insects and fungi mentioned in the study have been occasionally found in the locality during the past hundred years.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 312

Sales taxes tend to be regressive, affecting poor people more severely than wealthy people. When all purchases of consumer goods are taxed at a fixed percentage of the purchase price, poor people pay a larger proportion of their income in sales taxes than wealthy people do. It can be correctly inferred on the basis of the statements above that which of the following is true?

- A. Poor people constitute a larger proportion of the taxpaying population than wealthy people do.
- B. Poor people spend a larger proportion of their income on purchases of consumer goods than wealthy people do.
- C. Wealthy people pay, on average, a larger amount of sales taxes than poor people do.
- D. The total amount spent by all poor people on purchases of consumer goods exceeds the total amount spent by all wealthy people on consumer goods.
- E. The average purchase price of consumer goods bought by wealthy people is higher than that of consumer goods bought by poor people.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 313

Reviewing historical data, medical researchers in California found that counties with the largest number of television sets per capita have had the lowest incidence of a serious brain disease, mosquito-borne encephalitis. The researchers have concluded that people in these counties stay indoors more and thus avoid exposure to the disease.

The researchers' conclusion would be most strengthened if which of the following were true?

- A. Programs designed to control the size of disease-bearing mosquito populations have not affected the incidence of mosquito-borne encephalitis.
- B. The occupations of county residents affect their risk of exposure to mosquito-borne encephalitis more than does television-watching.
- C. The incidence of mosquito-borne encephalitis in counties with the largest number of television sets per capita is likely to decrease even further.
- D. The more time people in a county spend outdoors, the greater their awareness of the dangers of mosquito-borne encephalitis.
- E. The more television sets there are per capita in a county, the more time the average county resident spends watching television.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 314

The city's public transportation system should be removed from the jurisdiction of the municipal government, which finds it politically impossible either to raise fares or to institute cost-saving reductions in service. If public transportation were handled by a private firm, profits would be vigorously pursued, thereby eliminating the necessity for covering operating costs with government funds. The statements above best support the conclusion that

- A. the private firms that would handle public transportation would have experience in the transportation industry
- B. political considerations would not prevent private firms from ensuring that revenues cover operating costs
- C. private firms would receive government funding if it were needed to cover operating costs
- D. the public would approve the cost-cutting actions taken by the private firm
- E. the municipal government would not be resigned to accumulating merely enough income to cover costs

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 315

To entice customers away from competitors, Red Label supermarkets have begun offering discounts on home appliances to customers who spend \$50 or more on any shopping trip to Red Label. Red Label executives claim that the discount program has been a huge success, since cash register receipts of \$50 or more are up thirty percent since the beginning of the program. Which of the following, if true, most seriously weakens the claim of the Red Label executives?

- A. Most people who switched to Red Label after the program began spend more than \$50 each time they shop at Red Label.
- B. Most people whose average grocery bill is less than \$50 would not be persuaded to spend more by any discount program.
- C. Most people who received discounts on home appliances through Red Label's program will shop at Red Label after the program ends.
- D. Since the beginning of the discount program, most of the people who spend \$50 or more at Red Label are people who have never before shopped there and whose average grocery bill has always been higher than \$50.
- E. Almost all of the people who have begun spending \$50 or more at Red Label since the discount program began are longtime customers who have increased the average amount of their shopping bills by making fewer trips.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 316

Throughout the 1950's, there were increases in the numbers of dead birds found in agricultural areas after pesticide sprayings. Pesticide manufacturers claimed that the publicity given to bird deaths stimulated volunteers to look for dead birds, and that the increase in numbers reported was attributable to the increase in the number of people looking.

Which of the following statements, if true, would help to refute the claim of the pesticide manufacturers?

- A. The publicity given to bird deaths was largely regional and never reached national proportions.
- B. Pesticide sprayings were timed to coincide with various phases of the life cycles of the insects they destroyed.
- C. No provision was made to ensure that a dead bird would not be reported by more than one observer.
- D. Initial increases in bird deaths had been noticed by agricultural workers long before any publicity had been given to the matter.
- E. Dead birds of the same species as those found in agricultural areas had been found along coastal areas where no farming took place.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 317

Teenagers are often priced out of the labor market by the government-mandated minimum-wage level because employers cannot afford to pay that much for extra help. Therefore, if Congress institutes a subminimum wage, a new lower legal wage for teenagers, the teenage unemployment rate, which has been rising since 1960, will no longer increase.

Which of the following, if true, would most weaken the argument above?

- A. Since 1960 the teenage unemployment rate has risen when the minimum wage has risen.
- B. Since 1960 the teenage unemployment rate has risen even when the minimum wage remained constant.
- C. Employers often hire extra help during holiday and warm weather seasons.
- D. The teenage unemployment rate rose more quickly in the 1970's than it did in the 1960's.
- E. The teenage unemployment rate has occasionally declined in the years since 1960.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 318

Which of the following best completes the passage below? The computer industry's estimate that it loses millions of dollars when users illegally copy programs without paying for them is greatly exaggerated. Most of the illegal copying is done by people with no serious interest in the programs. Thus, the loss to the industry is much smaller than estimated because_____

- A. many users who illegally copy programs never find any use for them
- B. most of the illegally copied programs would not be purchased even if purchasing them were the only way to obtain them
- C. even if the computer industry received all the revenue it claims to be losing, it would still be experiencing financial difficulties
- D. the total market value of all illegal copies is low in comparison to the total revenue of the computer industry
- E. the number of programs that are frequently copied illegally is low in comparison to the number of programs available for sale

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 319

This year the New Hampshire Division of Company X set a new record for annual sales by that division. This record is especially surprising since the New Hampshire Division has the smallest potential market and the lowest sales of any of Company X's divisions. Which of the following identifies a flaw in the logical coherence of the statement above?

- A. If overall sales for Company X were sharply reduced, the New Hampshire Division's new sales record is irrelevant to the company's prosperity.
- B. Since the division is competing against its own record, the comparison of its sales record with that of other divisions is irrelevant.
- C. If this is the first year that the New Hampshire Division has been last in sales among Company X's divisions, the new record is not surprising at all.
- D. If overall sales for Company X were greater than usual, it is not surprising that the New Hampshire Division was last in sales.
- E. Since the New Hampshire Division has the smallest potential market, it is not surprising that it had the lowest sales.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 320

Statement of a United States copper mining company: Import quotas should be imposed on the less expensive copper mined outside the country to maintain the price of copper in this country; otherwise, our companies will not be able to stay in business.

Response of a United States copper wire manufacturer: United States wire and cable manufacturers purchase about 70 percent of the copper mined in the United States. If the copper prices we pay are not at the international level, our sales will drop, and then the demand for United States copper will go down.

If the factual information presented by both companies is accurate, the best assessment of the logical relationship between the two arguments is that the wire manufacturer's argument

- A. is self-serving and irrelevant to the proposal of the mining company
- B. is circular, presupposing what it seeks to prove about the proposal of the mining company
- C. shows that the proposal of the mining company would have a negative effect on the mining company's own business
- D. fails to give a reason why the proposal of the mining company should not be put into effect to alleviate the concern of the mining company for staying in business
- E. establishes that even the mining company's business will prosper if the mining company's proposal is rejected

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 321

Y has been believed to cause Z. A new report, noting that Y and Z are often observed to be preceded by X, suggests that X, not Y, may be the cause of Z.

Which of the following further observations would best support the new report's suggestion?

- A. In cases where X occurs but Y does not, X is usually followed by Z.
- B. In cases where X occurs, followed by Y, Y is usually followed by Z.
- C. In cases where Y occurs but X does not, Y is usually followed by Z.
- D. In cases where Y occurs but Z does not, Y is usually preceded by X.
- E. In cases where Z occurs, it is usually preceded by X and Y.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 322

Mr. Primm: If hospitals were private enterprises, dependent on profits for their survival, there would be no teaching hospitals, because of the intrinsically high cost of running such hospitals. Ms. Nakai: I disagree. The medical challenges provided by teaching hospitals attract the very best physicians. This, in turn, enables those hospitals to concentrate on no routine cases.

Which of the following, if true, would most strengthen Ms. Nakai's attempt to refute Mr. Primm's claim?

- A. Doctors at teaching hospitals command high salaries.
- B. Sophisticated, no routine medical care commands a high price.
- C. Existing teaching hospitals derive some revenue from public subsidies.
- D. The patient mortality rate at teaching hospitals is high.
- E. The modern trend among physicians is to become highly specialized.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 323

A recent survey of all auto accident victims in Dole County found that, of the severely injured drivers and front-seat passengers, 80 percent were not wearing seat belts at the time of their accidents. This indicates that, by wearing seat belts, drivers and front-seat passengers can greatly reduce their risk of being severely injured if they are in an auto accident.

The conclusion above is not properly drawn unless which of the following is true?

- A. Of all the drivers and front-seat passengers in the survey, more than 20 percent were wearing seat belts at the time of their accidents.
- B. Considerably more than 20 percent of drivers and front-seat passengers in Dole County always wear seat belts when traveling by car.
- C. More drivers and front-seat passengers in the survey than rear-seat passengers were very severely injured.
- D. More than half of the drivers and front-seat passengers in the survey were not wearing seat belts at the time of their accidents.
- E. Most of the auto accidents reported to police in Dole County do not involve any serious injury.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 324

Six months or so after getting a video recorder, many early buyers apparently lost interest in obtaining videos to watch on it. The trade of businesses selling and renting videos is still buoyant, because the number of homes with video recorders is still growing. But clearly, once the market for video

recorders is saturated, businesses distributing videos face hard times. Which of the following, if true, would most seriously weaken the conclusion above?

- A. The market for video recorders would not be considered saturated until there was one in 80 percent of homes.
- B. Among the items handled by video distributors are many films specifically produced as video features.
- C. Few of the early buyers of video recorders raised any complaints about performance aspects of the new product.
- D. The early buyers of a novel product are always people who are quick to acquire novelties, but also often as quick to tire of them.
- E. In a shrinking market, competition always intensifies and marginal businesses fail.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 325

Advertiser: The revenue that newspapers and magazines earn by publishing advertisements allows publishers to keep the prices per copy of their publications much lower than would otherwise be possible. Therefore, consumers benefit economically from advertising. Consumer: But who pays for the advertising that pays for low-priced newspapers and magazines? We consumers do, because advertisers pass along advertising costs to us through the higher prices they charge for their products.

Which of the following best describes how the consumer counters the advertiser's argument?

- A. By alleging something that, if true, would weaken the plausibility of the advertiser's conclusion
- B. By questioning the truth of the purportedly factual statement on which the advertiser's conclusion is based
- C. By offering an interpretation of the advertiser's opening statement that, if accurate, shows that there is an implicit contradiction in it
- D. By pointing out that the advertiser's point of view is biased
- E. By arguing that the advertiser too narrowly restricts the discussion to the effects of advertising that are economic

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 326

Mr. Lawson: We should adopt a national family policy that includes legislation requiring employers to provide paid parental leave and establishing government-sponsored day care. Such laws would decrease the stress levels of employees who have responsibility for small children. Thus, such laws would lead to happier, better-adjusted families.

Which of the following, if true, would most strengthen the conclusion above?

- A. An employee's high stress level can be a cause of unhappiness and poor adjustment for his or her family.
- B. People who have responsibility for small children and who work outside the home have higher stress levels than those who do not.
- C. The goal of a national family policy is to lower the stress levels of parents.
- D. Any national family policy that is adopted would include legislation requiring employers to provide paid parental leave and establishing government-sponsored day care.
- E. Most children who have been cared for in daycare centers are happy and well adjusted.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 327

Lark Manufacturing Company initiated a voluntary Quality Circles program for machine operators. Independent surveys of employee attitudes indicated that the machine operators participating in the program were less satisfied with their work situations after two years of the program's existence than they were at the program's start. Obviously, any workers who participate in a Quality Circles program will, as a result, become less satisfied with their jobs. Each of the following, if true, would weaken the conclusion drawn above EXCEPT:

- A. The second survey occurred during a period of recession when rumors of cutbacks and layoffs at Lark Manufacturing were plentiful.
- B. The surveys also showed that those Lark machine operators who neither participated in Quality Circles nor knew anyone who did so reported the same degree of lessened satisfaction with their work situations as did the Lark machine operators who participated in Quality Circles.
- C. While participating in Quality Circles at Lark Manufacturing, machine operators exhibited two of the primary indicators of improved job satisfaction: increased productivity and decreased absenteeism.
- D. Several workers at Lark Manufacturing who had participated in Quality Circles while employed at other companies reported that, while participating in Quality Circles in their previous companies, their work satisfaction had increased.
- E. The machine operators who participated in Quality Circles reported that, when the program started, they felt that participation might improve their work situations.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 328

Blood banks will shortly start to screen all donors for NANB hepatitis. Although the new screening tests are estimated to disqualify up to 5 percent of all prospective blood donors, they will still miss two-thirds of donors carrying NANB hepatitis. Therefore, about 10 percent of actual donors will still supply

NANB-contaminated blood.

The argument above depends on which of the following assumptions?

- A. Donors carrying NANB hepatitis do not, in a large percentage of cases, carry other infections for which reliable screening tests are routinely performed.
- B. Donors carrying NANB hepatitis do not, in a large percentage of cases, develop the disease themselves at any point.
- C. The estimate of the number of donors who would be disqualified by tests for NANB hepatitis is an underestimate.
- D. The incidence of NANB hepatitis is lower among the potential blood donors than it is in the population at large.
- E. The donors who will still supply NANB-contaminated blood will donate blood at the average frequency for all donors.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 329

Blood banks will shortly start to screen all donors for NANB hepatitis. Although the new screening tests are estimated to disqualify up to 5 percent of all prospective blood donors, they will still miss two-thirds of donors carrying NANB hepatitis. Therefore, about 10 percent of actual donors will still supply NANB-contaminated blood.

Which of the following inferences about the consequences of instituting the new tests is best supported by the passage above?

- A. The incidence of new cases of NANB hepatitis is likely to go up by 10 percent.
- B. Donations made by patients specifically for their own use are likely to become less frequent.
- C. The demand for blood from blood banks is likely to fluctuate more strongly.
- D. The blood supplies available from blood banks are likely to go down.
- E. The number of prospective first-time donors is likely to go up by 5 percent.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 330

Child's World, a chain of toy stores, has relied on a "supermarket concept" of computerized inventory control and customer self-service to eliminate the category of sales clerks from its force of employees. It now plans to employ the same concept in selling children's clothes.

The plan of Child's World assumes that

- A. supermarkets will not also be selling children's clothes in the same manner
- B. personal service by sales personnel is not required for selling children's clothes successfully
- C. the same kind of computers will be used in inventory control for both clothes and toys at Child's World
- D. a self-service plan cannot be employed without computerized inventory control
- E. sales clerks are the only employees of Child's World who could be assigned tasks related to inventory control

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 331

Continuous indoor fluorescent light benefits the health of hamsters with inherited heart disease. A group of them exposed to continuous fluorescent light survived twenty-five percent longer than a similar group exposed instead to equal periods of indoor fluorescent light and of darkness. The method of the research described above is most likely to be applicable in addressing which of the following questions?

- A. Can industrial workers who need to see their work do so better by sunlight or by fluorescent light?
- B. Can hospital lighting be improved to promote the recovery of patients?
- C. How do deep-sea fish survive in total darkness?
- D. What are the inherited illnesses to which hamsters are subject?
- E. Are there plants that require specific periods of darkness in order to bloom?

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 332

Millions of identical copies of a plant can be produced using new tissue-culture and cloning techniques. If plant propagation by such methods in laboratories proves economical, each of the following, if true, represents a benefit of the new techniques to farmers EXCEPT:

- A. The techniques allow the development of superior strains to take place more rapidly, requiring fewer generations of plants grown to maturity.
- B. It is less difficult to care for plants that will grow at rates that do not vary widely.
- C. Plant diseases and pests, once they take hold, spread more rapidly among genetically uniform plants than among those with genetic variations.
- D. Mechanical harvesting of crops is less difficult if plants are more uniform in size.

E. Special genetic traits can more easily be introduced into plant strains with the use of the new techniques.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 333

Which of the following best completes the passage below? Sales campaigns aimed at the faltering personal computer market have strongly emphasized ease of use, called user-friendliness. This emphasis is oddly premature and irrelevant in the eyes of most potential buyers, who are trying to address the logically prior issue of whether_____

- A. user-friendliness also implies that owners can service their own computers
- B. personal computers cost more the more user-friendly they are
- C. currently available models are user-friendly enough to suit them
- D. the people promoting personal computers use them in their own homes
- E. they have enough sensible uses for a personal computer to justify the expense of buying one

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 334

A weapons-smuggling incident recently took place in country Y. We all know that Y is a closed society. So Y's government must have known about the weapons. Which of the following is an assumption that would make the conclusion above logically correct?

- A. If a government knows about a particular weapons-smuggling incident, it must have intended to use the weapons for its own purposes.
- B. If a government claims that it knew nothing about a particular weapons-smuggling incident, it must have known everything about it.
- C. If a government does not permit weapons to enter a country, it is a closed society.
- D. If a country is a closed society, its government has a large contingent of armed guards patrolling its borders.
- E. If a country is a closed society, its government has knowledge about everything that occurs in the country.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 335

Banning cigarette advertisements in the mass media will not reduce the number of young people who smoke. They know that cigarettes exist and they know how to get them. They do not need the advertisements to supply that information.

The above argument would be most weakened if which of the following were true?

- A. Seeing or hearing an advertisement for a product tends to increase people's desire for that product.
- B. Banning cigarette advertisements in the mass media will cause an increase in advertisements in places where cigarettes are sold.
- C. Advertisements in the mass media have been an exceedingly large part of the expenditures of the tobacco companies.
- D. Those who oppose cigarette use have advertised against it in the mass media ever since cigarettes were found to be harmful.
- E. Older people tend to be less influenced by mass-media advertisements than younger people tend to be.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 336

People tend to estimate the likelihood of an event's occurrence according to its salience; that is, according to how strongly and how often it comes to their attention. By placement and headlines, newspapers emphasize stories about local crime over stories about crime elsewhere and about many other major events.

It can be concluded on the basis of the statements above that, if they are true, which of the following is most probably also true?

- A. The language used in newspaper headlines about local crime is inflammatory and fails to respect the rights of suspects.
- B. The coverage of international events in newspapers is neglected in favor of the coverage of local events.
- C. Readers of local news in newspapers tend to overestimate the amount of crime in their own localities relative to the amount of crime in other places.
- D. None of the events concerning other people that are reported in newspapers is so salient in people's minds as their own personal experiences.
- E. The press is the news medium that focuses people's attention most strongly on local crimes.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 337

By analyzing the garbage of a large number of average-sized households, a group of modern urban anthropologists has found that a household discards less food the more standardized--made up of canned and prepackaged foods--its diet is. The more standardized a household's diet is, however, the greater the quantities of fresh produce the household throws away. Which of the following can be properly inferred from the passage?

- A. An increasing number of households rely on a highly standardized diet.
- B. The less standardized a household's diet is, the more nonfood waste the household discards.
- C. The less standardized a household's diet is, the smaller is the proportion of fresh produce in the household's food waste.
- D. The less standardized a household's diet is, the more canned and prepackaged foods the household discards as waste.
- E. The more fresh produce a household buys, the more fresh produce it throws away.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 338

In the past, teachers, bank tellers, and secretaries were predominantly men; these occupations slipped in pay and status when they became largely occupied by women. Therefore, if women become the majority in currently male-dominated professions like accounting, law, and medicine, the income and prestige of these professions will also drop.

The argument above is based on

- A. another argument that contains circular reasoning
- B. an attempt to refute a generalization by means of an exceptional case
- C. an analogy between the past and the future
- D. an appeal to popular beliefs and values
- E. an attack on the character of the opposition

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 339

In the past, teachers, bank tellers, and secretaries were predominantly men; these occupations slipped in pay and status when they became largely occupied by women. Therefore, if women become the majority in currently male-dominated professions like accounting, law, and medicine, the income and prestige of these professions will also drop.

Which of the following, if true, would most likely be part of the evidence used to refute the conclusion above?

- A. Accountants, lawyers, and physicians attained their current relatively high levels of income and prestige at about the same time that the pay and status of teachers, bank tellers, and secretaries slipped.
- B. When large numbers of men join a female-dominated occupation, such as airline flight attendant, the status and pay of the occupation tend to increase.
- C. The demand for teachers and secretaries has increased significantly in recent years, while the demand for bank tellers has remained relatively stable.
- D. If present trends in the awarding of law degrees to women continue, it will be at least two decades before the majority of lawyers are women.
- E. The pay and status of female accountants, lawyers, and physicians today are governed by significantly different economic and sociological forces than were the pay and status of female teachers, bank tellers, and secretaries in the past.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 340

An electric-power company gained greater profits and provided electricity to consumers at lower rates per unit of electricity by building larger-capacity more efficient plants and by stimulating greater use of electricity within its area. To continue these financial trends, the company planned to replace an old plant by a plant with triple the capacity of its largest plant. The company's plan as described above assumed each of the following EXCEPT:

- A. Demand for electricity within the company's area of service would increase in the future.
- B. Expenses would not rise beyond the level that could be compensated for by efficiency or volume of operation, or both.
- C. The planned plant would be sufficiently reliable in service to contribute a net financial benefit to the company as a whole.
- D. Safety measures to be instituted for the new plant would be the same as those for the plant it would replace.
- E. The tripling of capacity would not result in insuperable technological obstacles to efficiency.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 341

Meteorologists say that if only they could design an accurate mathematical model of the atmosphere with all its complexities, they could forecast the weather with real precision. But this is an idle boast, immune to any evaluation, for any inadequate weather forecast would obviously be blamed on imperfections in the model.

Which of the following, if true, could best be used as a basis for arguing against the author's position that the meteorologists' claim cannot be evaluated?

- A. Certain unusual configurations of data can serve as the basis for precise weather forecasts even though the exact causal mechanisms are not understood.
- B. Most significant gains in the accuracy of the relevant mathematical models are accompanied by clear gains in the precision of weather forecasts.
- C. Mathematical models of the meteorological aftermath of such catastrophic events as volcanic eruptions are beginning to be constructed.
- D. Modern weather forecasts for as much as a full day ahead are broadly correct about 80 percent of the time.
- E. Meteorologists readily concede that the accurate mathematical model they are talking about is not now in their power to construct.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 342

Meteorologists say that if only they could design an accurate mathematical model of the atmosphere with all its complexities, they could forecast the weather with real precision. But this is an idle boast, immune to any evaluation, for any inadequate weather forecast would obviously be blamed on imperfections in the model.

Which of the following, if true, would cast the most serious doubt on the meteorologists' boast, aside from the doubt expressed in the passage above?

- A. The amount of energy that the Earth receives from the Sun is monitored closely and is known not to be constant.
- B. Volcanic eruptions, the combustion of fossil fuels, and several other processes that also cannot be quantified with any accuracy are known to have a significant and continuing impact on the constitution of the atmosphere.
- C. As current models of the atmosphere are improved, even small increments in complexity will mean large increases in the number of computers required for the representation of the models.
- D. Frequent and accurate data about the atmosphere collected at a large number of points both on and above the ground are a prerequisite for the construction of a good model of the atmosphere.
- E. With existing models of the atmosphere, large scale weather patterns can be predicted with greater accuracy than can relatively local weather patterns.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 343

Of the countries that were the world's twenty largest exporters in 1953, four had the same share of total world exports in 1984 as in 1953. Theses

countries can therefore serve as models for those countries that wish to keep their share of the global export trade stable over the years. Which of the following, if true, casts the most serious doubt on the suitability of those four countries as models in the sense described?

- A. Many countries wish to increase their share of world export trade, not just keep it stable.
- B. Many countries are less concerned with exports alone than with the balance between exports and imports.
- C. With respect to the mix of products each exports, the four countries are very different from each other.
- D. Of the four countries, two had a much larger, and two had a much smaller, share of total world exports in 1970 than in 1984.
- E. The exports of the four countries range from 15 percent to 75 percent of the total national output.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 344

In the United States, the Postal Service has a monopoly on first-class mail, but much of what is sent first class could be transmitted electronically. Electronic transmittal operators argue that if the Postal Service were to offer electronic transmission, it would have an unfair advantage, since its electronic transmission service could be subsidized from the profits of the monopoly. Which of the following, if each is true, would allay the electronic transmittal operators' fears of unfair competition?

- A. If the Postal Service were to offer electronic transmission, it could not make a profit on first-class mail.
- B. If the Postal Service were to offer electronic transmission, it would have a monopoly on that kind of service.
- C. Much of the material that is now sent by first-class mail could be delivered much faster by special package couriers, but is not sent that way because of cost.
- D. There is no economy of scale in electronic transmission--that is, the cost per transaction does not go down as more pieces of information are transmitted.
- E. Electronic transmission will never be cost-effective for material not sent by first-class mail such as newspapers and bulk mail.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 345

In the United States, the Postal Service has a monopoly on first-class mail, but much of what is sent first class could be transmitted electronically. Electronic transmittal operators argue that if the Postal Service were to offer electronic transmission, it would have an unfair advantage, since its electronic transmission service could be subsidized from the profits of the monopoly. Which of the following questions can be answered on the basis of

the information in the passage above?

- A. Is the Postal Service as efficient as privately owned electric transmission services?
- B. If private operators were allowed to operate first-class mail services, would they choose to do so?
- C. Do the electronic transmittal operators believe that the Postal Service makes a profit on first-class mail?
- D. Is the Postal Service prohibited from offering electronic transmission services?
- E. Is the Postal Service expected to have a monopoly on electronic transmission?

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 346

Lists of hospitals have been compiled showing which hospitals have patient death rates exceeding the national average. The data have been adjusted to allow for differences in the ages of patients. Each of the following, if true, provides a good logical ground for hospitals to object to interpreting rank on these lists as one of the indices of the quality of hospital care EXCEPT:

- A. Rank order might indicate insignificant differences, rather than large differences, in numbers of patient deaths.
- B. Hospitals that keep patients longer are likely to have higher death rates than those that discharge patients earlier but do not record deaths of patients at home after discharge.
- C. Patients who are very old on admission to a hospital are less likely than younger patients to survive the same types of illnesses or surgical procedures.
- D. Some hospitals serve a larger proportion of low-income patients, who tend to be more seriously ill when admitted to a hospital.
- E. For-profit hospitals sometimes do not provide intensive-care units and other expensive services for very sick patients but refer or transfer such patients to other hospitals.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 347

Teresa: Manned spaceflight does not have a future, since it cannot compete economically with other means of accomplishing the objectives of spaceflight.

Edward: No mode of human transportation has a better record of reliability: two accidents in twenty-five years. Thus manned spaceflight definitely has a positive future. Which of the following is the best logical evaluation of Edward's argument as a response to Teresa's argument?

- A. It cites evidence that, if true, tends to disprove the evidence cited by Teresa in drawing her conclusion.
- B. It indicates a logical gap in the support that Teresa offers for her conclusion.
- C. It raises a consideration that outweighs the argument Teresa makes.
- D. It does not meet Teresa's point because it assumes that there is no serious impediment to transporting people into space, but this was the issue raised by Teresa.
- E. It fails to respond to Teresa's argument because it does not address the fundamental issue of whether space activities should have priority over other claims on the national budget.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 348

Black Americans are, on the whole, about twice as likely as White Americans to develop high blood pressure. This likelihood also holds for westernized Black Africans when compared to White Africans. Researchers have hypothesized that this predisposition in westernized Blacks may reflect an interaction between western high-salt diets and genes that adapted to an environmental scarcity of salt. Which of the following statements about present-day, westernized Black Africans, if true, would most tend to confirm the researchers' hypothesis?

- A. The blood pressures of those descended from peoples situated throughout their history in Senegal and Gambia, where salt was always available, are low.
- B. The unusually high salt consumption in certain areas of Africa represents a serious health problem.
- C. Because of their blood pressure levels, most White Africans have markedly decreased their salt consumption.
- D. Blood pressures are low among the Yoruba, who, throughout their history, have been situated far inland from sources of sea salt and far south of Saharan salt mines.
- E. No significant differences in salt metabolism have been found between those people who have had salt available throughout their history and those who have not.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 349

The following proposal to amend the bylaws of an organization was circulated to its members for comment.

When more than one nominee is to be named for an office, prospective nominees must consent to nomination and before giving such consent must be

told who the other nominees will be. Which of the following comments concerning the logic of the proposal is accurate if it cannot be known who the actual nominees are until prospective nominees have given their consent to be nominated?

- A. The proposal would make it possible for each of several nominees for an office to be aware of who all of the other nominees are.
- B. The proposal would widen the choice available to those choosing among the nominees.
- C. If there are several prospective nominees, the proposal would deny the last nominee equal treatment with the first.
- D. The proposal would enable a prospective nominee to withdraw from competition with a specific person without making that withdrawal known.
- E. If there is more than one prospective nominee, the proposal would make it impossible for anyone to become a nominee.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 350

Which of the following best completes the passage below? In a survey of job applicants, two-fifths admitted to being at least a little dishonest. However, the survey may underestimate the proportion of job applicants who are dishonest, because_____

- A. some dishonest people taking the survey might have claimed on the survey to be honest
- B. some generally honest people taking the survey might have claimed on the survey to be dishonest
- C. some people who claimed on the survey to be at least a little dishonest may be very dishonest
- D. some people who claimed on the survey to be dishonest may have been answering honestly
- E. some people who are not job applicants are probably at least a little dishonest

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 351

The average life expectancy for the United States population as a whole is 73.9 years, but children born in Hawaii will live an average of 77 years, and those born in Louisiana, 71.7 years. If a newlywed couple from Louisiana were to begin their family in Hawaii, therefore, their children would be expected to live longer than would be the case if the family remained in Louisiana. Which of the following, if true, would most seriously weaken the conclusion drawn in the passage?

- A. Insurance company statisticians do not believe that moving to Hawaii will significantly lengthen the average Louisianian's life.

- B. The governor of Louisiana has falsely alleged that statistics for his state are inaccurate.
- C. The longevity ascribed to Hawaii's current population is attributable mostly to genetically determined factors.
- D. Thirty percent of all Louisianians can expect to live longer than 77 years.
- E. Most of the Hawaiian Islands have levels of air pollution well below the national average for the United States.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 352

The average life expectancy for the United States population as a whole is 73.9 years, but children born in Hawaii will live an average of 77 years, and those born in Louisiana, 71.7 years. If a newlywed couple from Louisiana were to begin their family in Hawaii, therefore, their children would be expected to live longer than would be the case if the family remained in Louisiana. Which of the following statements, if true, would most significantly strengthen the conclusion drawn in the passage?

- A. As population density increases in Hawaii, life expectancy figures for that state are likely to be revised downward.
- B. Environmental factors tending to favor longevity are abundant in Hawaii and less numerous in Louisiana.
- C. Twenty-five percent of all Louisianians who move to Hawaii live longer than 77 years.
- D. Over the last decade, average life expectancy has risen at a higher rate for Louisianians than for Hawaiians.
- E. Studies show that the average life expectancy for Hawaiians who move permanently to Louisiana is roughly equal to that of Hawaiians who remain in Hawaii.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 353

Insurance Company X is considering issuing a new policy to cover services required by elderly people who suffer from diseases that afflict the elderly. Premiums for the policy must be low enough to attract customers. Therefore, Company X is concerned that the income from the policies would not be sufficient to pay for the claims that would be made.

Which of the following strategies would be most likely to minimize Company X's losses on the policies?

- A. Attracting middle-aged customers unlikely to submit claims for benefits for many years
- B. Insuring only those individuals who did not suffer any serious diseases as children

- C. Including a greater number of services in the policy than are included in other policies of lower cost
- D. Insuring only those individuals who were rejected by other companies for similar policies
- E. Insuring only those individuals who are wealthy enough to pay for the medical services

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 354

A program instituted in a particular state allows parents to prepay their children's future college tuition at current rates. The program then pays the tuition annually for the child at any of the state's public colleges in which the child enrolls. Parents should participate in the program as a means of decreasing the cost for their children's college education.

Which of the following, if true, is the most appropriate reason for parents not to participate in the program?

- A. The parents are unsure about which public college in the state the child will attend.
- B. The amount of money accumulated by putting the prepayment funds in an interest-bearing account today will be greater than the total cost of tuition for any of the public colleges when the child enrolls.
- C. The annual cost of tuition at the state's public colleges is expected to increase at a faster rate than the annual increase in the cost of living.
- D. Some of the state's public colleges are contemplating large increases in tuition next year.
- E. The prepayment plan would not cover the cost of room and board at any of the state's public colleges.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Corrected.

QUESTION 355

Company Alpha buys free-travel coupons from people who are awarded the coupons by Bravo Airlines for flying frequently on Bravo airplanes. The coupons are sold to people who pay less for the coupons than they would pay by purchasing tickets from Bravo. This marketing of coupons results in lost revenue for Bravo.

To discourage the buying and selling of free-travel coupons, it would be best for Bravo Airlines to restrict the

- A. number of coupons that a person can be awarded in a particular year
- B. use of the coupons to those who were awarded the coupons and members of their immediate families
- C. days that the coupons can be used to Monday through Friday

- D. amount of time that the coupons can be used after they are issued
- E. number of routes on which travelers can use the coupons

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 356

The ice on the front windshield of the car had formed when moisture condensed during the night. The ice melted quickly after the car was warmed up the next morning because the defrosting vent, which blows only on the front windshield, was turned on full force. Which of the following, if true, most seriously jeopardizes the validity of the explanation for the speed with which the ice melted?

- A. The side windows had no ice condensation on them.
- B. Even though no attempt was made to defrost the back window, the ice there melted at the same rate as did the ice on the front windshield.
- C. The speed at which ice on a window melts increases as the temperature of the air blown on the window increases.
- D. The warm air from the defrosting vent for the front windshield cools rapidly as it dissipates throughout the rest of the car.
- E. The defrosting vent operates efficiently even when the heater, which blows warm air toward the feet or faces of the driver and passengers, is on.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 357

To prevent some conflicts of interest, Congress could prohibit high-level government officials from accepting positions as lobbyists for three years after such officials leave government service. One such official concluded, however, that such a prohibition would be unfortunate because it would prevent high-level government officials from earning a livelihood for three years. The official's conclusion logically depends on which of the following assumptions?

- A. Laws should not restrict the behavior of former government officials.
- B. Lobbyists are typically people who have previously been high-level government officials.
- C. Low-level government officials do not often become lobbyists when they leave government service.
- D. High-level government officials who leave government service are capable of earning a livelihood only as lobbyists.
- E. High-level government officials who leave government service are currently permitted to act as lobbyists for only three years.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 358

A conservation group in the United States is trying to change the long-standing image of bats as frightening creatures. The group contends that bats are feared and persecuted solely because they are shy animals that are active only at night.

Which of the following, if true, would cast the most serious doubt on the accuracy of the group's contention?

- A. Bats are steadily losing natural roosting places such as caves and hollow trees and are thus turning to more developed areas for roosting.
- B. Bats are the chief consumers of nocturnal insects and thus can help make their hunting territory more pleasant for humans.
- C. Bats are regarded as frightening creatures not only in the United States but also in Europe, Africa, and South America.
- D. Raccoons and owls are shy and active only at night; yet they are not generally feared and persecuted.
- E. People know more about the behavior of other greatly feared animal species, such as lions, alligators, and snakes, than they do about the behavior of bats.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 359

Meteorite explosions in the Earth's atmosphere as large as the one that destroyed forests in Siberia, with approximately the force of a twelve-megaton nuclear blast, occur about once a century. The response of highly automated systems controlled by complex computer programs to unexpected circumstances is unpredictable.

Which of the following conclusions can most properly be drawn, if the statements above are true, about a highly automated nuclear-missile defense system controlled by a complex computer program?

- A. Within a century after its construction, the system would react inappropriately and might accidentally start a nuclear war.
- B. The system would be destroyed if an explosion of a large meteorite occurred in the Earth's atmosphere.
- C. It would be impossible for the system to distinguish the explosion of a large meteorite from the explosion of a nuclear weapon.
- D. Whether the system would respond inappropriately to the explosion of a large meteorite would depend on the location of the blast.
- E. It is not certain what the system's response to the explosion of a large meteorite would be, if its designers did not plan for such a contingency.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 360

The fewer restrictions there are on the advertising of legal services, the more lawyers there are who advertise their services, and the lawyers who advertise a specific service usually charge less for that service than lawyers who do not advertise. Therefore, if the state removes any of its current restrictions, such as the one against advertisements that do not specify fee arrangements, overall consumer legal costs will be lower than if the state retains its current restrictions. If the statements above are true, which of the following must be true?

- A. Some lawyers who now advertise will charge more for specific services if they do not have to specify fee arrangements in the advertisements.
- B. More consumers will use legal services if there are fewer restrictions on the advertising of legal services.
- C. If the restriction against advertisements that do not specify fee arrangements is removed, more lawyers will advertise their services.
- D. If more lawyers advertise lower prices for specific services, some lawyers who do not advertise will also charge less than they currently charge for those services.
- E. If the only restrictions on the advertising of legal services were those that apply to every type of advertising, most lawyers would advertise their services.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 361

The fewer restrictions there are on the advertising of legal services, the more lawyers there are who advertise their services, and the lawyers who advertise a specific service usually charge less for that service than lawyers who do not advertise. Therefore, if the state removes any of its current restrictions, such as the one against advertisements that do not specify fee arrangements, overall consumer legal costs will be lower than if the state retains its current restrictions. Which of the following, if true, would most seriously weaken the argument concerning overall consumer legal costs?

- A. The state has recently removed some other restrictions that had limited the advertising of legal services.
- B. The state is unlikely to remove all of the restrictions that apply solely to the advertising of legal services.
- C. Lawyers who do not advertise generally provide legal services of the same quality as those provided by lawyers who do advertise.
- D. Most lawyers who now specify fee arrangements in their advertisements would continue to do so even if the specification were not required.
- E. Most lawyers who advertise specific services do not lower their fees for those services when they begin to advertise.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:**QUESTION 362**

Defense Department analysts worry that the ability of the United States to wage a prolonged war would be seriously endangered if the machine-tool manufacturing base shrinks further. Before the Defense Department publicly connected this security issue with the import quota issue, however, the machine-tool industry raised the national security issue in its petition for import quotas. Which of the following, if true, contributes most to an explanation of the machine-tool industry's raising the issue above regarding national security?

- A. When the aircraft industries retooled, they provided a large amount of work for tool builders.
- B. The Defense Department is only marginally concerned with the effects of foreign competition on the machine-tool industry.
- C. The machine-tool industry encountered difficulty in obtaining governmental protection against imports on grounds other than defense.
- D. A few weapons important for defense consist of parts that do not require extensive machining.
- E. Several federal government programs have been designed which will enable domestic machine-tool manufacturing firms to compete successfully with foreign toolmakers.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:**QUESTION 363**

Opponents of laws that require automobile drivers and passengers to wear seat belts argue that in a free society people have the right to take risks as long as the people do not harm others as a result of taking the risks. As a result, they conclude that it should be each person's decision whether or not to wear a seat belt.

Which of the following, if true, most seriously weakens the conclusion drawn above?

- A. Many new cars are built with seat belts that automatically fasten when someone sits in the front seat.
- B. Automobile insurance rates for all automobile owners are higher because of the need to pay for the increased injuries or deaths of people not wearing seat belts.
- C. Passengers in airplanes are required to wear seat belts during takeoffs and landings.
- D. The rate of automobile fatalities in states that do not have mandatory seat-belt laws is greater than the rate of fatalities in states that do have such laws.
- E. In automobile accidents, a greater number of passengers who do not wear seat belts are injured than are passengers who do wear seat belts.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 364

The cost of producing radios in Country Q is ten percent less than the cost of producing radios in Country Y. Even after transportation fees and tariff charges are added, it is still cheaper for a company to import radios from Country Q to Country Y than to produce radios in Country Y. The statements above, if true, best support which of the following assertions?

- A. Labor costs in Country Q are ten percent below those in Country Y.
- B. Importing radios from Country Q to Country Y will eliminate ten percent of the manufacturing jobs in Country Y.
- C. The tariff on a radio imported from Country Q to Country Y is less than ten percent of the cost of manufacturing the radio in Country Y.
- D. The fee for transporting a radio from Country Q to Country Y is more than ten percent of the cost of manufacturing the radio in Country Q.
- E. It takes ten percent less time to manufacture a radio in Country Q than it does in Country Y.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 365

During the Second World War, about 375,000 civilians died in the United States and about 408,000 members of the United States armed forces died overseas. On the basis of those figures, it can be concluded that it was not much more dangerous to be overseas in the armed forces during the Second World War than it was to stay at home as a civilian.

Which of the following would reveal most clearly the absurdity of the conclusion drawn above?

- A. Counting deaths among members of the armed forces who served in the United States in addition to deaths among members of the armed forces serving overseas
- B. Expressing the difference between the numbers of deaths among civilians and members of the armed forces as a percentage of the total number of deaths
- C. Separating deaths caused by accidents during service in the armed forces from deaths caused by combat injuries
- D. Comparing death rates per thousand members of each group rather than comparing total numbers of deaths
- E. Comparing deaths caused by accidents in the United States to deaths caused by combat in the armed forces

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 366

One state adds a 7 percent sales tax to the price of most products purchased within its jurisdiction. This tax, therefore, if viewed as tax on income, has the reverse effect of the federal income tax: the lower the income, the higher the annual percentage rate at which the income is taxed. The conclusion above would be properly drawn if which of the following were assumed as a premise?

- A. The amount of money citizens spend on products subject to the state tax tends to be equal across income levels.
- B. The federal income tax favors citizens with high incomes, whereas the state sales tax favors citizens with low incomes.
- C. Citizens with low annual incomes can afford to pay a relatively higher percentage of their incomes in state sales tax, since their federal income tax is relatively low.
- D. The lower a state's sales tax, the more it will tend to redistribute income from the more affluent citizens to the rest of society.
- E. Citizens who fail to earn federally taxable income are also exempt from the state sales tax.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 367

The average age of chief executive officers (CEO's) in a large sample of companies is 57. The average age of CEO's in those same companies 20 years ago was approximately eight years younger. On the basis of those data, it can be concluded that CEO's in general tend to be older now. Which of the following casts the most doubt on the conclusion drawn above?

- A. The dates when the CEO's assumed their current positions have not been specified.
- B. No information is given concerning the average number of years that CEO's remain in office.
- C. The information is based only on companies that have been operating for at least 20 years.
- D. Only approximate information is given concerning the average age of the CEO's 20 years ago.
- E. Information concerning the exact number of companies in the sample has not been given.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 368

Surveys show that every year only 10 percent of cigarette smokers switch brands. Yet the manufacturers have been spending an amount equal to 10

percent of their gross receipts on cigarette promotion in magazines. It follows from these figures that inducing cigarette smokers to switch brands did not pay, and that cigarette companies would have been no worse off economically if they had dropped their advertising. Of the following, the best criticism of the conclusion that inducing cigarette smokers to switch brands did not pay is that the conclusion is based on

- A. computing advertising costs as a percentage of gross receipts, not of overall costs
- B. past patterns of smoking and may not carry over to the future
- C. the assumption that each smoker is loyal to a single brand of cigarettes at any one time
- D. the assumption that each manufacturer produces only one brand of cigarettes
- E. figures for the cigarette industry as a whole and may not hold for a particular company

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 369

Surveys show that every year only 10 percent of cigarette smokers switch brands. Yet the manufacturers have been spending an amount equal to 10 percent of their gross receipts on cigarette promotion in magazines. It follows from these figures that inducing cigarette smokers to switch brands did not pay, and that cigarette companies would have been no worse off economically if they had dropped their advertising.

Which of the following, if true, most seriously weakens the conclusion that cigarette companies could have dropped advertising without suffering economically?

- A. Cigarette advertisements provide a major proportion of total advertising revenue for numerous magazines.
- B. Cigarette promotion serves to attract first-time smokers to replace those people who have stopped smoking.
- C. There exists no research conclusively demonstrating that increases in cigarette advertising are related to increases in smoking.
- D. Advertising is so firmly established as a major business activity of cigarette manufacturers that they would be unlikely to drop it.
- E. Brand loyalty is typically not very strong among those who smoke inexpensive cigarettes.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 370

Toughened hiring standards have not been the primary cause of the present staffing shortage in public schools. The shortage of teachers is primarily caused by the fact that in recent years teachers have not experienced any improvements in working conditions and their salaries have not kept pace with salaries in other professions.

Which of the following, if true, would most support the claims above?

- A. Many teachers already in the profession would not have been hired under the new hiring standards.
- B. Today more teachers are entering the profession with a higher educational level than in the past.
- C. Some teachers have cited higher standards for hiring as a reason for the current staffing shortage.
- D. Many teachers have cited low pay and lack of professional freedom as reasons for their leaving the profession.
- E. Many prospective teachers have cited the new hiring standards as a reason for not entering the profession.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 371

A proposed ordinance requires the installation in new homes of sprinklers automatically triggered by the presence of a fire. However, a home builder argued that because more than ninety percent of residential fires are extinguished by a household member, residential sprinklers would only marginally decrease property damage caused by residential fires.

Which of the following, if true, would most seriously weaken the home builder's argument?

- A. Most individuals have no formal training in how to extinguish fires.
- B. Since new homes are only a tiny percentage of available housing in the city, the new ordinance would be extremely narrow in scope.
- C. The installation of smoke detectors in new residences costs significantly less than the installation of sprinklers.
- D. In the city where the ordinance was proposed, the average time required by the fire department to respond to a fire was less than the national average.
- E. The largest proportion of property damage that results from residential fires is caused by fires that start when no household member is present.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 372

Even though most universities retain the royalties from faculty members' inventions, the faculty members retain the royalties from books and articles they write. Therefore, faculty members should retain the royalties from the educational computer software they develop. The conclusion above would be more reasonably drawn if which of the following were inserted into the argument as an additional premise?

- A. Royalties from inventions are higher than royalties from educational software programs.
- B. Faculty members are more likely to produce educational software programs than inventions.
- C. Inventions bring more prestige to universities than do books and articles.
- D. In the experience of most universities, educational software programs are more marketable than are books and articles.
- E. In terms of the criteria used to award royalties, educational software programs are more nearly comparable to books and articles than to inventions.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 373

Increases in the level of high-density lipoprotein (HDL) in the human bloodstream lower bloodstream- cholesterol levels by increasing the body's capacity to rid itself of excess cholesterol. Levels of HDL in the bloodstream of some individuals are significantly increased by a program of regular exercise and weight reduction.

Which of the following can be correctly inferred from the statements above?

- A. Individuals who are underweight do not run any risk of developing high levels of cholesterol in the bloodstream.
- B. Individuals who do not exercise regularly have a high risk of developing high levels of cholesterol in the bloodstream late in life.
- C. Exercise and weight reduction are the most effective methods of lowering bloodstream cholesterol levels in humans.
- D. A program of regular exercise and weight reduction lowers cholesterol levels in the bloodstream of some individuals.
- E. Only regular exercise is necessary to decrease cholesterol levels in the bloodstream of individuals of average weight.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 374

When limitations were in effect on nuclear-arms testing, people tended to save more of their money, but when nuclear-arms testing increased, people tended to spend more of their money. The perceived threat of nuclear catastrophe, therefore, decreases the willingness of people to postpone consumption for the sake of saving money.

The argument above assumes that

- A. the perceived threat of nuclear catastrophe has increased over the years
- B. most people supported the development of nuclear arms

- C. people's perception of the threat of nuclear catastrophe depends on the amount of nuclear-arms testing being done
- D. the people who saved the most money when nuclear-arms testing was limited were the ones who supported such limitations
- E. there are more consumer goods available when nuclear-arms testing increases

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 375

Which of the following best completes the passage below?

People buy prestige when they buy a premium product. They want to be associated with something special. Mass-marketing techniques and price-reduction strategies should not be used because_____

- A. affluent purchasers currently represent a shrinking portion of the population of all purchasers
- B. continued sales depend directly on the maintenance of an aura of exclusivity
- C. purchasers of premium products are concerned with the quality as well as with the price of the products
- D. expansion of the market niche to include a broader spectrum of consumers will increase profits
- E. manufacturing a premium brand is not necessarily more costly than manufacturing a standard brand of the same product

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 376

A cost-effective solution to the problem of airport congestion is to provide high-speed ground transportation between major cities lying 200 to 500 miles apart. The successful implementation of this plan would cost far less than expanding existing airports and would also reduce the number of airplanes clogging both airports and airways.

Which of the following, if true, could proponents of the plan above most appropriately cite as a piece of evidence for the soundness of their plan?

- A. An effective high-speed ground-transportation system would require major repairs to many highways and mass-transit improvements.
- B. One-half of all departing flights in the nation's busiest airport head for a destination in a major city 225 miles away.
- C. The majority of travelers departing from rural airports are flying to destinations in cities over 600 miles away.
- D. Many new airports are being built in areas that are presently served by high-speed ground- transportation systems.

E. A large proportion of air travelers are vacationers who are taking long-distance flights.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 377

If there is an oil-supply disruption resulting in higher international oil prices, domestic oil prices in open-market countries such as the United States will rise as well, whether such countries import all or none of their oil.

If the statement above concerning oil-supply disruptions is true, which of the following policies in an open-market nation is most likely to reduce the long-term economic impact on that nation of sharp and unexpected increases in international oil prices?

- A. Maintaining the quantity of oil imported at constant yearly levels
- B. Increasing the number of oil tankers in its fleet
- C. Suspending diplomatic relations with major oil-producing nations
- D. Decreasing oil consumption through conservation
- E. Decreasing domestic production of oil

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 378

If there is an oil-supply disruption resulting in higher international oil prices, domestic oil prices in open-market countries such as the United States will rise as well, whether such countries import all or none of their oil.

Which of the following conclusions is best supported by the statement above?

- A. Domestic producers of oil in open-market countries are excluded from the international oil market when there is a disruption in the international oil supply.
- B. International oil-supply disruptions have little, if any, effect on the price of domestic oil as long as an open-market country has domestic supplies capable of meeting domestic demand.
- C. The oil market in an open-market country is actually part of the international oil market, even if most of that country's domestic oil is usually sold to consumers within its borders.
- D. Open-market countries that export little or none of their oil can maintain stable domestic oil prices even when international oil prices rise sharply.

E. If international oil prices rise, domestic distributors of oil in open-market countries will begin to import more oil than they export.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 379

The average normal infant born in the United States weighs between twelve and fourteen pounds at the age of three months. Therefore, if a three-month-old child weighs only ten pounds, its weight gain has been below the United States average.

Which of the following indicates a flaw in the reasoning above?

- A. Weight is only one measure of normal infant development.
- B. Some three-month-old children weigh as much as seventeen pounds.
- C. It is possible for a normal child to weigh ten pounds at birth.
- D. The phrase "below average" does not necessarily mean insufficient.
- E. Average weight gain is not the same as average weight.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 380

Red blood cells in which the malarial-fever parasite resides are eliminated from a person's body after 120 days. Because the parasite cannot travel to a new generation of red blood cells, any fever that develops in a person more than 120 days after that person has moved to a malaria-free region is not due to the malarial parasite.

Which of the following, if true, most seriously weakens the conclusion above?

- A. The fever caused by the malarial parasite may resemble the fever caused by flu viruses.
- B. The anopheles mosquito, which is the principal insect carrier of the malarial parasite, has been eradicated in many parts of the world.
- C. Many malarial symptoms other than the fever, which can be suppressed with antimalarial medication, can reappear within 120 days after the medication is discontinued.
- D. In some cases, the parasite that causes malarial fever travels to cells of the spleen, which are less frequently eliminated from a person's body than are red blood cells.
- E. In any region infested with malaria-carrying mosquitoes, there are individuals who appear to be immune to malaria.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 381

Fact 1: Television advertising is becoming less effective: the proportion of brand names promoted on television that viewers of the advertising can recall is slowly decreasing. Fact 2: Television viewers recall commercials aired first or last in a cluster of consecutive commercials far better than they recall commercials aired somewhere in the middle. Fact 2 would be most likely to contribute to an explanation of fact 1 if which of the following were also true?

- A. The average television viewer currently recalls fewer than half the brand names promoted in commercials he or she saw.
- B. The total time allotted to the average cluster of consecutive television commercials is decreasing.
- C. The average number of hours per day that people spend watching television is decreasing.
- D. The average number of clusters of consecutive commercials per hour of television is increasing.
- E. The average number of television commercials in a cluster of consecutive commercials is increasing.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 382

The number of people diagnosed as having a certain intestinal disease has dropped significantly in a rural county this year, as compared to last year. Health officials attribute this decrease entirely to improved sanitary conditions at water-treatment plants, which made for cleaner water this year and thus reduced the incidence of the disease.

Which of the following, if true, would most seriously weaken the health officials' explanation for the lower incidence of the disease?

- A. Many new water-treatment plants have been built in the last five years in the rural county.
- B. Bottled spring water has not been consumed in significantly different quantities by people diagnosed as having the intestinal disease, as compared to people who did not contract the disease.
- C. Because of a new diagnostic technique, many people who until this year would have been diagnosed as having the intestinal disease are now correctly diagnosed as suffering from intestinal ulcers.
- D. Because of medical advances this year, far fewer people who contract the intestinal disease will develop severe cases of the disease.
- E. The water in the rural county was brought up to the sanitary standards of the water in neighboring counties ten years ago.

Correct Answer: C

Section: Critical Reasoning Questions**Explanation****Explanation/Reference:****QUESTION 383**

The price the government pays for standard weapons purchased from military contractors is determined by a pricing method called "historical costing." Historical costing allows contractors to protect their profits by adding a percentage increase, based on the current rate of inflation, to the previous year's contractual price.

Which of the following statements, if true, is the best basis for a criticism of historical costing as an economically sound pricing method for military contracts?

- A. The government might continue to pay for past inefficient use of funds.
- B. The rate of inflation has varied considerably over the past twenty years.
- C. The contractual price will be greatly affected by the cost of materials used for the products.
- D. Many taxpayers question the amount of money the government spends on military contracts.
- E. The pricing method based on historical costing might not encourage the development of innovative weapons.

Correct Answer: A

Section: Critical Reasoning Questions**Explanation****Explanation/Reference:****QUESTION 384**

Some who favor putting governmental enterprises into private hands suggest that conservation objectives would in general be better served if private environmental groups were put in charge of operating and financing the national park system, which is now run by the government. Which of the following, assuming that it is a realistic possibility, argues most strongly against the suggestion above?

- A. Those seeking to abolish all restrictions on exploiting the natural resources of the parks might join the private environmental groups as members and eventually take over their leadership.
- B. Private environmental groups might not always agree on the best ways to achieve conservation objectives.
- C. If they wished to extend the park system, the private environmental groups might have to seek contributions from major donors and the general public.
- D. There might be competition among private environmental groups for control of certain park areas.
- E. Some endangered species, such as the California condor, might die out despite the best efforts of the private environmental groups, even if those groups are not hampered by insufficient resources.

Correct Answer: A

Section: Critical Reasoning Questions**Explanation****Explanation/Reference:****QUESTION 385**

A recent spate of launching and operating mishaps with television satellites led to a corresponding surge in claims against companies underwriting satellite insurance. As a result, insurance premiums shot up, making satellites more expensive to launch and operate. This, in turn, has added to the pressure to squeeze more performance out of currently operating satellites. Which of the following, if true, taken together with the information above, best supports the conclusion that the cost of television satellites will continue to increase?

- A. Since the risk to insurers of satellites is spread over relatively few units, insurance premiums are necessarily very high.
- B. When satellites reach orbit and then fail, the causes of failure are generally impossible to pinpoint with confidence.
- C. The greater the performance demands placed on satellites, the more frequently those satellites break down.
- D. Most satellites are produced in such small numbers that no economies of scale can be realized.
- E. Since many satellites are built by unwieldy international consortia, inefficiencies are inevitable.

Correct Answer: C

Section: Critical Reasoning Questions**Explanation****Explanation/Reference:****QUESTION 386**

Tocqueville, a nineteenth-century writer known for his study of democracy in the United States, believed that a government that centralizes power in one individual or institution is dangerous to its citizens. Biographers claim that Tocqueville disliked centralized government because he blamed Napoleon's rule for the poverty of his childhood in Normandy. Which of the following, if true, would cast the most serious doubt on the biographers' claim?

- A. Although Napoleon was popularly blamed at the time for the terrible living conditions in Normandy, historians now know that bad harvests were really to blame for the poor economic conditions.
- B. Napoleon was notorious for refusing to share power with any of his political associates.
- C. Tocqueville said he knew that if his father had not suffered ill health, his family would have had a steady income and a comfortable standard of living.
- D. Although Tocqueville asserted that United States political life was democratic, the United States of the nineteenth century allowed political power to be concentrated in a few institutions.
- E. Tocqueville once wrote in a letter that, although his childhood was terribly impoverished, it was not different from the experience of his friends and neighbors in Normandy.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 387

Radio interferometry is a technique for studying details of celestial objects that combines signals intercepted by widely spaced radio telescopes. This technique requires ultraprecise timing, exact knowledge of the locations of the telescopes, and sophisticated computer programs. The successful interferometric linking of an Earth-based radio telescope with a radio telescope on an orbiting satellite was therefore a significant technological accomplishment. Which of the following can be correctly inferred from the statements above?

- A. Special care was taken in the launching of the satellite so that the calculations of its orbit would be facilitated.
- B. The signals received on the satellite are stronger than those received by a terrestrial telescope.
- C. The resolution of detail achieved by the satellite-Earth interferometer system is inferior to that achieved by exclusively terrestrial systems.
- D. The computer programs required for making use of the signals received by the satellite required a long time for development.
- E. The location of an orbiting satellite relative to locations on Earth can be well enough known for interferometric purposes.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 388

Recent estimates predict that between 1982 and 1995 the greatest increase in the number of people employed will be in the category of low-paying service occupations. This category, however, will not increase its share of total employment, whereas the category of high-paying service occupations will increase its share.

If the estimates above are accurate, which of the following conclusions can be drawn?

- A. In 1982 more people were working in low-paying service occupations than were working in high-paying service occupations.
- B. In 1995 more people will be working in high-paying service occupations than will be working in low-paying service occupations.
- C. Nonservice occupations will account for the same share of total employment in 1995 as in 1982.
- D. Many of the people who were working in low-paying service occupations in 1982 will be working in high-paying service occupations by 1995.
- E. The rate of growth for low-paying service occupations will be greater than the overall rate of employment growth between 1982 and 1995.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 389

For a local government to outlaw all strikes by its workers is a costly mistake, because all its labor disputes must then be settled by binding arbitration, without any negotiated public-sector labor settlements guiding the arbitrators. Strikes should be outlawed only for categories of public-sector workers for whose services no acceptable substitute exists. The statements above best support which of the following conclusions?

- A. Where public-service workers are permitted to strike, contract negotiations with those workers are typically settled without a strike.
- B. Where strikes by all categories of public-sector workers are outlawed, no acceptable substitutes for the services provided by any of those workers are available.
- C. Binding arbitration tends to be more advantageous for public-service workers where it is the only available means of settling labor disputes with such workers.
- D. Most categories of public-sector workers have no counterparts in the private sector.
- E. A strike by workers in a local government is unlikely to be settled without help from an arbitrator.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 390

Rural households have more purchasing power than do urban or suburban households at the same income level, since some of the income urban and suburban households use for food and shelter can be used by rural households for other needs. Which of the following inferences is best supported by the statement made above?

- A. The average rural household includes more people than does the average urban or suburban household.
- B. Rural households have lower food and housing costs than do either urban or suburban households.
- C. Suburban households generally have more purchasing power than do either rural or urban households.
- D. The median income of urban and suburban households is generally higher than that of rural households.
- E. All three types of households spend more of their income on food and housing than on all other purchases combined.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 391

In 1985 state border colleges in Texas lost the enrollment of more than half, on average, of the Mexican nationals they had previously served each year. Teaching faculties have alleged that this extreme drop resulted from a rise in tuition for international and out-of-state students from \$40 to \$120 per credit hour.

Which of the following, if feasible, offers the best prospects for alleviating the problem of the drop in enrollment of Mexican nationals as the teaching faculties assessed it?

- A. Providing grants-in-aid to Mexican nationals to study in Mexican universities
- B. Allowing Mexican nationals to study in Texas border colleges and to pay in-state tuition rates, which are the same as the previous international rate
- C. Reemphasizing the goals and mission of the Texas state border colleges as serving both in-state students and Mexican nationals
- D. Increasing the financial resources of Texas colleges by raising the tuition for in-state students attending state institutions
- E. Offering career counseling for those Mexican nationals who graduate from state border colleges and intend to return to Mexico

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 392

Affirmative action is good business. So asserted the National Association of Manufacturers while urging retention of an executive order requiring some federal contractors to set numerical goals for hiring minorities and women. "Diversity in work force participation has produced new ideas in management, product development, and marketing," the association claimed. The association's argument as it is presented in the passage above would be most strengthened if which of the following were true?

- A. The percentage of minority and women workers in business has increased more slowly than many minority and women's groups would prefer.
- B. Those businesses with the highest percentages of minority and women workers are those that have been the most innovative and profitable.
- C. Disposable income has been rising as fast among minorities and women as among the population as a whole.
- D. The biggest growth in sales in the manufacturing sector has come in industries that market the most innovative products.
- E. Recent improvements in management practices have allowed many manufacturers to experience enormous gains in worker productivity.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 393

If the airspace around centrally located airports were restricted to commercial airliners and only those private planes equipped with radar, most of the private-plane traffic would be forced to use outlying airfields. Such a reduction in the amount of private-plane traffic would reduce the risk of midair

collision around the centrally located airports.

The conclusion drawn in the first sentence depends on which of the following assumptions?

- A. Outlying airfields would be as convenient as centrally located airports for most pilots of private planes.
- B. Most outlying airfields are not equipped to handle commercial-airline traffic.
- C. Most private planes that use centrally located airports are not equipped with radar.
- D. Commercial airliners are at greater risk of becoming involved in midair collisions than are private planes.
- E. A reduction in the risk of midair collision would eventually lead to increases in commercial-airline traffic.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 394

If the airspace around centrally located airports were restricted to commercial airliners and only those private planes equipped with radar, most of the private-plane traffic would be forced to use outlying airfields. Such a reduction in the amount of private-plane traffic would reduce the risk of midair collision around the centrally located airports.

Which of the following, if true, would most strengthen the conclusion drawn in the second sentence?

- A. Commercial airliners are already required by law to be equipped with extremely sophisticated radar systems.
- B. Centrally located airports are experiencing over-crowded airspace primarily because of sharp increases in commercial-airline traffic.
- C. Many pilots of private planes would rather buy radar equipment than be excluded from centrally located airports.
- D. The number of midair collisions that occur near centrally located airports has decreased in recent years.
- E. Private planes not equipped with radar systems cause a disproportionately large number of midair collisions around centrally located airports.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 395

Which of the following best completes the passage below? Established companies concentrate on defending what they already have. Consequently, they tend not to be innovative themselves and tend to underestimate the effects of the innovations of others. The clearest example of this defensive strategy is the fact that_____

- A. ballpoint pens and soft-tip markers have eliminated the traditional market for fountain pens, clearing the way for the marketing of fountain pens as luxury or prestige items
- B. a highly successful automobile was introduced by the same company that had earlier introduced a model that had been a dismal failure
- C. a once-successful manufacturer of slide rules reacted to the introduction of electronic calculators by trying to make better slide rules
- D. one of the first models of modern accounting machines, designed for use in the banking industry, was purchased by a public library as well as by banks
- E. the inventor of a commonly used anesthetic did not intend the product to be used by dentists, who currently account for almost the entire market for that drug

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 396

Most archaeologists have held that people first reached the Americas less than 20,000 years ago by crossing a land bridge into North America. But recent discoveries of human shelters in South America dating from 32,000 years ago have led researchers to speculate that people arrived in South America first, after voyaging across the Pacific, and then spread northward. Which of the following, if it were discovered, would be pertinent evidence against the speculation above?

- A. A rock shelter near Pittsburgh, Pennsylvania, contains evidence of use by human beings 19,000 years ago.
- B. Some North American sites of human habitation predate any sites found in South America.
- C. The climate is warmer at the 32,000-year-old south American site than at the oldest known North American site.
- D. The site in South America that was occupied 32,000 years ago was continuously occupied until 6,000 years ago.
- E. The last Ice Age, between 11,500 and 20,000 years ago, considerably lowered worldwide sea levels.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 397

In Asia, where palm trees are non-native, the trees' flowers have traditionally been pollinated by hand, which has kept palm fruit productivity unnaturally low. When weevils known to be efficient pollinators of palm flowers were introduced into Asia in 1980, palm fruit productivity increased--by up to fifty percent in some areas--but then decreased sharply in 1984. Which of the following statements, if true, would best explain the 1984 decrease in productivity?

- A. Prices for palm fruit fell between 1980 and 1984 following the rise in production and a concurrent fall in demand.
- B. Imported trees are often more productive than native trees because the imported ones have left behind their pests and diseases in their native lands.
- C. Rapid increases in productivity tend to deplete trees of nutrients needed for the development of the fruit-producing female flowers.
- D. The weevil population in Asia remained at approximately the same level between 1980 and 1984.
- E. Prior to 1980 another species of insect pollinated the Asian palm trees, but not as efficiently as the species of weevil that was introduced in 1980.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 398

Since the mayor's publicity campaign for Greenville's bus service began six months ago, morning automobile traffic into the midtown area of the city has decreased seven percent. During the same period, there has been an equivalent rise in the number of persons riding buses into the midtown area. Obviously, the mayor's publicity campaign has convinced many people to leave their cars at home and ride the bus to work. Which of the following, if true, casts the most serious doubt on the conclusion drawn above?

- A. Fares for all bus routes in Greenville have risen an average of five percent during the past six months.
- B. The mayor of Greenville rides the bus to City Hall in the city's midtown area.
- C. Road reconstruction has greatly reduced the number of lanes available to commuters in major streets leading to the midtown area during the past six months.
- D. The number of buses entering the midtown area of Greenville during the morning hours is exactly the same now as it was one year ago.
- E. Surveys show that longtime bus riders are no more satisfied with the Greenville bus service than they were before the mayor's publicity campaign began.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 399

In the aftermath of a worldwide stock-market crash, Country T claimed that the severity of the stock-market crash it experienced resulted from the accelerated process of denationalization many of its industries underwent shortly before the crash. Which of the following, if it could be carried out, would be most useful in an evaluation of Country T's assessment of the causes of the severity of its stock-market crash?

- A. Calculating the average loss experienced by individual traders in Country T during the crash
- B. Using economic theory to predict the most likely date of the next crash in Country T
- C. Comparing the total number of shares sold during the worst days of the crash in Country T to the total number of shares sold in Country T just prior to the crash
- D. Comparing the severity of the crash in Country T to the severity of the crash in countries otherwise economically similar to Country T that have not experienced recent denationalization
- E. Comparing the long-term effects of the crash on the purchasing power of the currency of Country T to the immediate, more severe short-term effects of the crash on the purchasing power of the currency of Country T

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 400

With the emergence of biotechnology companies, it was feared that they would impose silence about proprietary results on their in-house researchers and their academic consultants. This constraint, in turn, would slow the development of biological science and engineering. Which of the following, if true, would tend to weaken most seriously the prediction of scientific secrecy described above?

- A. Biotechnological research funded by industry has reached some conclusions that are of major scientific importance.
- B. When the results of scientific research are kept secret, independent researchers are unable to build on those results.
- C. Since the research priorities of biotechnology companies are not the same as those of academic institutions, the financial support of research by such companies distorts the research agenda.
- D. To enhance the companies' standing in the scientific community, the biotechnology companies encourage employees to publish their results, especially results that are important.
- E. Biotechnology companies devote some of their research resources to problems that are of fundamental scientific importance and that are not expected to produce immediate practical applications.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 401

Some people have questioned the judge's objectivity in cases of sex discrimination against women. But the record shows that in sixty percent of such cases, the judge has decided in favor of the women. This record demonstrates that the judge has not discriminated against women in cases of sex discrimination against women.

The argument above is flawed in that it ignores the possibility that

- A. a large number of the judge's cases arose out of allegations of sex discrimination against women
- B. many judges find it difficult to be objective in cases of sex discrimination against women
- C. the judge is biased against women defendants or plaintiffs in cases that do not involve sex discrimination
- D. the majority of the cases of sex discrimination against women that have reached the judge's court have been appealed from a lower court
- E. the evidence shows that the women should have won in more than sixty percent of the judge's cases involving sex discrimination against women

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 402

The tobacco industry is still profitable and projections are that it will remain so. In the United States this year, the total amount of tobacco sold by tobacco-farmers has increased, even though the number of adults who smoke has decreased.

Each of the following, if true, could explain the simultaneous increase in tobacco sales and decrease in the number of adults who smoke EXCEPT:

- A. During this year, the number of women who have begun to smoke is greater than the number of men who have quit smoking.
- B. The number of teen-age children who have begun to smoke this year is greater than the number of adults who have quit smoking during the same period.
- C. During this year, the number of nonsmokers who have begun to use chewing tobacco or snuff is greater than the number of people who have quit smoking.
- D. The people who have continued to smoke consume more tobacco per person than they did in the past.
- E. More of the cigarettes made in the United States this year were exported to other countries than was the case last year.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 403

Kale has more nutritional value than spinach. But since collard greens have more nutritional value than lettuce, it follows that kale has more nutritional value than lettuce. Any of the following, if introduced into the argument as an additional premise, makes the argument above logically correct EXCEPT:

- A. Collard greens have more nutritional value than kale.

- B. Spinach has more nutritional value than lettuce.
- C. Spinach has more nutritional value than collard greens.
- D. Spinach and collard greens have the same nutritional value.
- E. Kale and collard greens have the same nutritional value.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 404

On the basis of a decrease in the college-age population, many colleges now anticipate increasingly smaller freshman classes each year. Surprised by a 40 percent increase in qualified applicants over the previous year, however, administrators at Nice College now plan to hire more faculty for courses taken by all freshmen.

Which of the following statements about Nice College's current qualified applicants, if true, would strongly suggest that the administrators' plan is flawed?

- A. A substantially higher percentage than usual plan to study for advanced degrees after graduation from college.
- B. According to their applications, their level of participation in extracurricular activities and varsity sports is unusually high.
- C. According to their applications, none of them lives in a foreign country.
- D. A substantially lower percentage than usual rate Nice College as their first choice among the colleges to which they are applying.
- E. A substantially lower percentage than usual list mathematics as their intended major.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 405

A researcher discovered that people who have low levels of immune-system activity tend to score much lower on tests of mental health than do people with normal or high immune-system activity. The researcher concluded from this experiment that the immune system protects against mental illness as well as against physical disease.

The researcher's conclusion depends on which of the following assumptions?

- A. High immune-system activity protects against mental illness better than normal immune-system activity does.
- B. Mental illness is similar to physical disease in its effects on body system.

- C. People with high immune-system activity cannot develop mental illness.
- D. Mental illness does not cause people's immune-system activity to decrease.
- E. Psychological treatment of mental illness is not as effective as is medical treatment.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 406

A researcher discovered that people who have low levels of immune-system activity tend to score much lower on tests of mental health than do people with normal or high immune-system activity. The researcher concluded from this experiment that the immune system protects against mental illness as well as against physical disease.

The researcher's conclusion would be most seriously weakened if it were true that

- A. there was a one-year delay between the completion of a pilot study for the experiment and the initiation of the experiment itself
- B. people's levels of immune-system activity are not affected by their use of medications
- C. a few people with high immune-system activity had scores on the test of mental health that were similar to the scores of people who had normal immune-system activity
- D. people who have low immune-system activity tend to contract more viral infections than do people with normal or high immune-system activity
- E. high levels of stress first cause mental illness and then cause decreased immune-system activity in normal individuals

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 407

The value of a product is determined by the ratio of its quality to its price. The higher the value of a product, the better will be its competitive position. Therefore, either increasing the quality or lowering the price of a given product will increase the likelihood that consumer will select that product rather than a competing one.

Which of the following, if true, would most strengthen the conclusion drawn above?

- A. It is possible to increase both the quality and the price of a product without changing its competitive position.
- B. For certain segments of the population of consumers, higher-priced brands of some product lines are preferred to the lower-priced brands.
- C. Competing products often try to appeal to different segments of the population of consumers.

- D. The competitive position of a product can be affected by such factors as advertising and brand loyalty.
- E. Consumers' perceptions of the quality of a product are based on the actual quality of the product.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 408

In January there was a large drop in the number of new houses sold, because interest rates for mortgages were falling and many consumers were waiting to see how low the rates would go. This large sales drop was accompanied by a sharp rise in the average price of new houses sold. Which of the following, if true, best explains the sharp rise in the average price of new houses?

- A. Sales of higher-priced houses were unaffected by the sales drop because their purchasers have fewer constraints limiting the total amount they pay.
- B. Labor agreements of builders with construction unions are not due to expire until the next January.
- C. The prices of new houses have been rising slowly over the past three years because there is an increasing shortage of housing.
- D. There was a greater amount of moderate-priced housing available for resale by owners during January than in the preceding three months.
- E. Interest rates for home mortgages are expected to rise sharply later in the year if predictions of increased business activity in general prove to be accurate.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 409

Seven countries signed a treaty binding each of them to perform specified actions on a certain fixed date, with the actions of each conditional on simultaneous action taken by the other countries. Each country was also to notify the six other countries when it had completed its action. The simultaneous-action provision of the treaty leaves open the possibility that

- A. the compliance date was subject to postponement, according to the terms of the treaty
- B. one of the countries might not be required to make any changes or take any steps in order to comply with the treaty, whereas all the other countries are so required
- C. each country might have a well-founded excuse, based on the provision, for its own lack of compliance
- D. the treaty specified that the signal for one of the countries to initiate action was notification by the other countries that they had completed action
- E. there was ambiguity with respect to the date after which all actions contemplated in the treaty are to be complete

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 410

A milepost on the towpath read "21" on the side facing the hiker as she approached it and "23" on its back. She reasoned that the next milepost forward on the path would indicate that she was halfway between one end of the path and the other. However, the milepost one mile further on read "20" facing her and "24" behind.

Which of the following, if true, would explain the discrepancy described above?

- A. The numbers on the next milepost had been reversed.
- B. The numbers on the mileposts indicate kilometers, not miles.
- C. The facing numbers indicate miles to the end of the path, not miles from the beginning.
- D. A milepost was missing between the two the hiker encountered.
- E. The mileposts had originally been put in place for the use of mountain bikers, not for hikers.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 411

Airline: Newly developed collision-avoidance systems, although not fully tested to discover potential malfunctions, must be installed immediately in passenger planes. Their mechanical warnings enable pilots to avoid crashes.

Pilots: Pilots will not fly in planes with collision-avoidance systems that are not fully tested. Malfunctioning systems could mislead pilots, causing crashes. The pilots' objection is most strengthened if which of the following is true?

- A. It is always possible for mechanical devices to malfunction.
- B. Jet engines, although not fully tested when first put into use, have achieved exemplary performance and safety records.
- C. Although collision-avoidance systems will enable pilots to avoid some crashes, the likely malfunctions of the not-fully-tested systems will cause even more crashes.
- D. Many airline collisions are caused in part by the exhaustion of overworked pilots.
- E. Collision-avoidance systems, at this stage of development, appear to have worked better in passenger planes than in cargo planes during experimental flights made over a six-month period.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 412

Guitar strings often go "dead"--become less responsive and bright in tone--after a few weeks of intense use. A researcher whose son is a classical guitarist hypothesized that dirt and oil, rather than changes in the material properties of the string, were responsible. Which of the following investigations is most likely to yield significant information that would help to evaluate the researcher's hypothesis?

- A. Determining if a metal alloy is used to make the strings used by classical guitarists
- B. Determining whether classical guitarists make their strings go dead faster than do folk guitarists
- C. Determining whether identical lengths of string, of the same gauge, go dead at different rates when strung on various brands of guitars
- D. Determining whether a dead string and a new string produce different qualities of sound
- E. Determining whether smearing various substances on new guitar strings causes them to go dead

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 413

Most consumers do not get much use out of the sports equipment they purchase. For example, seventeen percent of the adults in the United States own jogging shoes, but only forty-five percent of the owners jog more than once a year, and only seventeen percent jog more than once a week. Which of the following, if true, casts most doubt on the claim that most consumers get little use out of the sports equipment they purchase?

- A. Joggers are most susceptible to sports injuries during the first six months in which they jog.
- B. Joggers often exaggerate the frequency with which they jog in surveys designed to elicit such information.
- C. Many consumers purchase jogging shoes for use in activities other than jogging.
- D. Consumers who take up jogging often purchase an athletic shoe that can be used in other sports.
- E. Joggers who jog more than once a week are often active participants in other sports as well.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 414

Two decades after the Emerald River Dam was built, none of the eight fish species native to the Emerald River was still reproducing adequately in the river below the dam. Since the dam reduced the annual range of water temperature in the river below the dam from 50 degrees to 6 degrees, scientists have hypothesized that sharply rising water temperatures must be involved in signaling the native species to begin the reproductive cycle. Which of the following statements, if true, would most strengthen the scientists' hypothesis?

- A. The native fish species were still able to reproduce only in side streams of the river below the dam where the annual temperature range remains approximately 50 degrees.
- B. Before the dam was built, the Emerald River annually overflowed its banks, creating backwaters that were critical breeding areas for the native species of fish.
- C. The lowest recorded temperature of the Emerald River before the dam was built was 34 degrees, whereas the lowest recorded temperature of the river after the dam was built has been 43 degrees.
- D. Nonnative species of fish, introduced into the Emerald River after the dam was built, have begun competing with the declining native fish species for food and space.
- E. Five of the fish species native to the Emerald River are not native to any other river in North America.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 415

It is true that it is against international law to sell plutonium to countries that do not yet have nuclear weapons. But if United States companies do not do so, companies in other countries will. Which of the following is most like the argument above in its logical structure?

- A. It is true that it is against the police department's policy to negotiate with kidnappers. But if the police want to prevent loss of life, they must negotiate in some cases.
- B. It is true that it is illegal to refuse to register for military service. But there is a long tradition in the United States of conscientious objection to serving in the armed forces.
- C. It is true that it is illegal for a government official to participate in a transaction in which there is an apparent conflict of interest. But if the facts are examined carefully, it will clearly be seen that there was no actual conflict of interest in the defendant's case.
- D. It is true that it is against the law to burglarize people's homes. But someone else certainly would have burglarized that house if the defendant had not done so first.
- E. It is true that company policy forbids supervisors to fire employees without two written warnings. But there have been many supervisors who have disobeyed this policy.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 416

In recent years many cabinetmakers have been winning acclaim as artists. But since furniture must be useful, cabinetmakers must exercise their craft with an eye to the practical utility of their product. For this reason, cabinetmaking is not art.

Which of the following is an assumption that supports drawing the conclusion above from the reason given for that conclusion?

- A. Some furniture is made to be placed in museums, where it will not be used by anyone.
- B. Some cabinetmakers are more concerned than others with the practical utility of the products they produce.
- C. Cabinetmakers should be more concerned with the practical utility of their products than they currently are.
- D. An object is not an art object if its maker pays attention to the object's practical utility.
- E. Artists are not concerned with the monetary value of their products.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 417

Although custom prosthetic bone replacements produced through a new computer-aided design process will cost more than twice as much as ordinary replacements, custom replacements should still be cost-effective. Not only will surgery and recovery time be reduced, but custom replacements should last longer, thereby reducing the need for further hospital stays. Which of the following must be studied in order to evaluate the argument presented above?

- A. The amount of time a patient spends in surgery versus the amount of time spent recovering from surgery
- B. The amount by which the cost of producing custom replacements has declined with the introduction of the new technique for producing them
- C. The degree to which the use of custom replacements is likely to reduce the need for repeat surgery when compared with the use of ordinary replacements
- D. The degree to which custom replacements produced with the new technique are more carefully manufactured than are ordinary replacements
- E. The amount by which custom replacements produced with the new technique will drop in cost as the production procedures become standardized and applicable on a larger scale

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 418

Extinction is a process that can depend on a variety of ecological, geographical, and physiological variables. These variables affect different species of organisms in different ways, and should, therefore, yield a random pattern of extinctions. However, the fossil record shows that extinction occurs in a surprisingly definite pattern, with many species vanishing at the same time. Which of the following, if true, forms the best basis for at least a partial explanation of the patterned extinctions revealed by the fossil record?

- A. Major episodes of extinction can result from widespread environmental disturbances that affect numerous different species.
- B. Certain extinction episodes selectively affect organisms with particular sets of characteristics unique to their species.
- C. Some species become extinct because of accumulated gradual changes in their local environments.
- D. In geologically recent times, for which there is no fossil record, human intervention has changed the pattern of extinctions.
- E. Species that are widely dispersed are the least likely to become extinct.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 419

Neither a rising standard of living nor balanced trade, by itself, establishes a country's ability to compete in the international marketplace. Both are required simultaneously since standards of living can rise because of growing trade deficits and trade can be balanced by means of a decline in a country's standard of living.

If the facts stated in the passage above are true, a proper test of a country's ability to be competitive is its ability to

- A. balance its trade while its standard of living rises
- B. balance its trade while its standard of living falls
- C. increase trade deficits while its standard of living rises
- D. decrease trade deficits while its standard of living falls
- E. keep its standard of living constant while trade deficits rise

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 420

Certain messenger molecules fight damage to the lungs from noxious air by telling the muscle cells encircling the lungs' airways to contract. This partially seals off the lungs. An asthma attack occurs when the messenger molecules are activated unnecessarily, in response to harmless things like pollen or household dust.

Which of the following, if true, points to the most serious flaw of a plan to develop a medication that would prevent asthma attacks by blocking receipt of any messages sent by the messenger molecules referred to above?

- A. Researchers do not yet know how the body produces the messenger molecules that trigger asthma attacks.
- B. Researchers do not yet know what makes one person's messenger molecules more easily activated than another's.
- C. Such a medication would not become available for several years, because of long lead times in both development and manufacture.
- D. Such a medication would be unable to distinguish between messages triggered by pollen and household dust and messages triggered by noxious air.
- E. Such a medication would be a preventative only and would be unable to alleviate an asthma attack once it had started.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 421

Since the routine use of antibiotics can give rise to resistant bacteria capable of surviving antibiotic environments, the presence of resistant bacteria in people could be due to the human use of prescription antibiotics. Some scientists, however, believe that most resistant bacteria in people derive from human consumption of bacterially infected meat.

Which of the following statements, if true, would most significantly strengthen the hypothesis of the scientists?

- A. Antibiotics are routinely included in livestock feed so that livestock producers can increase the rate of growth of their animals.
- B. Most people who develop food poisoning from bacterially infected meat are treated with prescription antibiotics.
- C. The incidence of resistant bacteria in people has tended to be much higher in urban areas than in rural areas where meat is of comparable quality.
- D. People who have never taken prescription antibiotics are those least likely to develop resistant bacteria.
- E. Livestock producers claim that resistant bacteria in animals cannot be transmitted to people through infected meat.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 422

The recent decline in the value of the dollar was triggered by a prediction of slower economic growth in the coming year. But that prediction would not have adversely affected the dollar had it not been for the government's huge budget deficit, which must therefore be decreased to prevent future currency declines.

Which of the following, if true, would most seriously weaken the conclusion about how to prevent future currency declines?

- A. The government has made little attempt to reduce the budget deficit.
- B. The budget deficit has not caused a slowdown in economic growth.
- C. The value of the dollar declined several times in the year prior to the recent prediction of slower economic growth.
- D. Before there was a large budget deficit, predictions of slower economic growth frequently caused declines in the dollar's value.
- E. When there is a large budget deficit, other events in addition to predictions of slower economic growth sometimes trigger declines in currency value.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 423

Which of the following best completes the passage below? At a recent conference on environmental threats to the North Sea, most participating countries favored uniform controls on the quality of effluents, whether or not specific environmental damage could be attributed to a particular source of effluent. What must, of course, be shown, in order to avoid excessively restrictive controls, is that _____

- A. any uniform controls that are adopted are likely to be implemented without delay
- B. any substance to be made subject to controls can actually cause environmental damage
- C. the countries favoring uniform controls are those generating the largest quantities of effluents
- D. all of any given pollutant that is to be controlled actually reaches the North Sea at present
- E. environmental damage already inflicted on the North Sea is reversible

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 424

Traditionally, decision-making by managers that is reasoned step-by-step has been considered preferable to intuitive decision-making. However, a recent study found that top managers used intuition significantly more than did most middle- or lower-level managers. This confirms the alternative view

that intuition is actually more effective than careful, methodical reasoning. The conclusion above is based on which of the following assumptions?

- A. Methodical, step-by-step reasoning is inappropriate for making many real-life management decisions.
- B. Top managers have the ability to use either intuitive reasoning or methodical, step-by-step reasoning in making decisions.
- C. The decisions made by middle- and lower-level managers can be made as easily by using methodical reasoning as by using intuitive reasoning.
- D. Top managers use intuitive reasoning in making the majority of their decisions.
- E. Top managers are more effective at decision-making than middle- or lower-level managers.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 425

The imposition of quotas limiting imported steel will not help the big American steel mills. In fact, the quotas will help "mini-mills" flourish in the United States. Those small domestic mills will take more business from the big American steel mills than would have been taken by the foreign steel mills in the absence of quotas.

Which of the following, if true, would cast the most serious doubt on the claim made in the last sentence above?

- A. Quality rather than price is a major factor in determining the type of steel to be used for a particular application.
- B. Foreign steel mills have long produced grades of steel comparable in quality to the steel produced by the big American mills.
- C. American quotas on imported goods have often induced other countries to impose similar quotas on American goods.
- D. Domestic "mini-mills" consistently produce better grades of steel than do the big American mills.
- E. Domestic "mini-mills" produce low-volume, specialized types of steels that are not produced by the big American steel mills.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 426

Correctly measuring the productivity of service workers is complex. Consider, for example, postal workers: they are often said to be more productive if more letters are delivered per postal worker. But is this really true? What if more letters are lost or delayed per worker at the same time that more are delivered?

The objection implied above to the productivity measure described is based on doubts about the truth of which of the following statements?

- A. Postal workers are representative of service workers in general.
- B. The delivery of letters is the primary activity of the postal service.
- C. Productivity should be ascribed to categories of workers, not to individuals.
- D. The quality of services rendered can appropriately be ignored in computing productivity.
- E. The number of letters delivered is relevant to measuring the productivity of postal workers.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 427

Male bowerbirds construct elaborately decorated nests, or bowers. Basing their judgment on the fact that different local populations of bowerbirds of the same species build bowers that exhibit different building and decorative styles, researchers have concluded that the bowerbirds' building styles are a culturally acquired, rather than a genetically transmitted, trait. Which of the following, if true, would most strengthen the conclusion drawn by the researchers?

- A. There are more common characteristics than there are differences among the bower-building styles of the local bowerbird population that has been studied most extensively.
- B. Young male bowerbirds are inept at bower-building and apparently spend years watching their elders before becoming accomplished in the local bower style.
- C. The bowers of one species of bowerbird lack the towers and ornamentation characteristic of the bowers of most other species of bowerbird.
- D. Bowerbirds are found only in New Guinea and Australia, where local populations of the birds apparently seldom have contact with one another.
- E. It is well known that the song dialects of some songbirds are learned rather than transmitted genetically.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 428

A greater number of newspapers are sold in Town S than in Town T. Therefore, the citizens of Town S are better informed about major world events than are the citizens of Town T. Each of the following, if true, weakens the conclusion above EXCEPT:

- A. Town S has a larger population than Town T.
- B. Most citizens of Town T work in Town S and buy their newspapers there.

- C. The average citizen of Town S spends less time reading newspapers than does the average citizen of Town T.
- D. A weekly newspaper restricted to the coverage of local events is published in Town S.
- E. The average newsstand price of newspapers sold in Town S is lower than the average price of newspapers sold in Town T.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Still Valid.

QUESTION 429

One analyst predicts that Hong Kong can retain its capitalist ways after it becomes part of mainland China in 1997 as long as a capitalist Hong Kong is useful to China; that a capitalist Hong Kong will be useful to China as long as Hong Kong is prosperous; and that Hong Kong will remain prosperous as long as it retains its capitalist ways.

If the predictions above are correct, which of the following further predictions can logically be derived from them?

- A. If Hong Kong fails to stay prosperous, it will no longer remain part of mainland China.
- B. If Hong Kong retains its capitalist ways until 1997, it will be allowed to do so afterward.
- C. If there is a world economic crisis after 1997, it will not adversely affect the economy of Hong Kong.
- D. Hong Kong will be prosperous after 1997.
- E. The citizens of Hong Kong will have no restrictions placed on them by the government of mainland China.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 430

A drug that is highly effective in treating many types of infection can, at present, be obtained only from the bark of the ibora, a tree that is quite rare in the wild. It takes the bark of 5,000 trees to make one kilogram of the drug. It follows, therefore, that continued production of the drug must inevitably lead to the ibora's extinction.

Which of the following, if true, most seriously weakens the argument above?

- A. The drug made from ibora bark is dispensed to doctors from a central authority.
- B. The drug made from ibora bark is expensive to produce.
- C. The leaves of the ibora are used in a number of medical products.
- D. The ibora can be propagated from cuttings and grown under cultivation.

E. The ibora generally grows in largely inaccessible places.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 431

High levels of fertilizer and pesticides, needed when farmers try to produce high yield of the same crop year after year, pollute water supplies. Experts therefore urge farmers to diversify their crops and to rotate their plantings yearly.

To receive governmental price-support benefits for a crop, farmers must have produced that same crop for the past several years.

The statements above, if true, best support which of the following conclusions?

- A. The rules for governmental support of farm prices work against efforts to reduce water pollution.
- B. The only solution to the problem of water pollution from fertilizers and pesticides is to take farmland out of production.
- C. Farmers can continue to make a profit by rotating diverse crops, thus reducing costs for chemicals, but not by planting the same crop each year.
- D. New farming techniques will be developed to make it possible for farmers to reduce the application of fertilizers and pesticides.
- E. Governmental price supports for farm products are set at levels that are not high enough to allow farmers to get out of debt.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 432

Shelby Industries manufactures and sells the same gauges as Jones Industries. Employee wages account for forty percent of the cost of manufacturing gauges at both Shelby Industries and Jones Industries. Shelby Industries is seeking a competitive advantage over Jones Industries. Therefore, to promote this end, Shelby Industries should lower employee wages.

Which of the following, if true, would most weaken the argument above?

- A. Because they make a small number of precision instruments, gauge manufacturers cannot receive volume discounts on raw materials.
- B. Lowering wages would reduce the quality of employee work, and this reduced quality would lead to lowered sales.
- C. Jones Industries has taken away twenty percent of Shelby Industries' business over the last year.
- D. Shelby Industries pays its employees, on average, ten percent more than does Jones Industries.
- E. Many people who work for manufacturing plants live in areas in which the manufacturing plant they work for is the only industry.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 433

Some communities in Florida are populated almost exclusively by retired people and contain few, if any, families with small children. Yet these communities are home to thriving businesses specializing in the rental of furniture for infants and small children. Which of the following, if true, best reconciles the seeming discrepancy described above?

- A. The businesses specializing in the rental of children's furniture buy their furniture from distributors outside of Florida.
- B. The few children who do reside in these communities all know each other and often make overnight visits to one another's houses.
- C. Many residents of these communities who move frequently prefer renting their furniture to buying it outright.
- D. Many residents of these communities must provide for the needs of visiting grandchildren several weeks a year.
- E. Children's furniture available for rental is of the same quality as that available for sale in the stores.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 434

Large national budget deficits do not cause large trade deficits. If they did, countries with the largest budget deficits would also have the largest trade deficits. In fact, when deficit figures are adjusted so that different countries are reliably comparable to each other, there is no such correlation. If the statements above are all true, which of the following can properly be inferred on the basis of them?

- A. Countries with large national budget deficits tend to restrict foreign trade.
- B. Reliable comparisons of the deficit figures of one country with those of another are impossible.
- C. Reducing a country's national budget deficit will not necessarily result in a lowering of any trade deficit that country may have.
- D. When countries are ordered from largest to smallest in terms of population, the smallest countries generally have the smallest budget and trade deficits.
- E. Countries with the largest trade deficits never have similarly large national budget deficits.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:**QUESTION 435**

"Fast cycle time" is a strategy of designing a manufacturing organization to eliminate bottlenecks and delays in production. Not only does it speed up production, but it also assures quality. The reason is that the bottlenecks and delays cannot be eliminated unless all work is done right the first time. The claim about quality made above rests on a questionable presupposition that

- A. any flaw in work on a product would cause a bottleneck or delay and so would be prevented from occurring on a "fast cycle" production line
- B. the strategy of "fast cycle time" would require fundamental rethinking of product design
- C. the primary goal of the organization is to produce a product of unexcelled quality, rather than to generate profits for stockholders
- D. "fast cycle time" could be achieved by shaving time off each of the component processes in production cycle
- E. "fast cycle time" is a concept in business strategy that has not yet been put into practice in a factory

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:**QUESTION 436**

Many breakfast cereals are fortified with vitamin supplements. Some of these cereals provide 100 percent of the recommended daily requirement of vitamins. Nevertheless, a well-balanced breakfast, including a variety of foods, is a better source of those vitamins than are such fortified breakfast cereals alone.

Which of the following, if true, would most strongly support the position above?

- A. In many foods, the natural combination of vitamins with other nutrients makes those vitamins more usable by the body than are vitamins added in vitamin supplements.
- B. People who regularly eat cereals fortified with vitamin supplements sometimes neglect to eat the foods in which the vitamins occur naturally.
- C. Foods often must be fortified with vitamin supplements because naturally occurring vitamins are removed during processing.
- D. Unprocessed cereals are naturally high in several of the vitamins that are usually added to fortified breakfast cereals.
- E. Cereals containing vitamin supplements are no harder to digest than similar cereals without added vitamins.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 437

Which of the following best completes the passage below? The more worried investors are about losing their money, the more they will demand a high potential return on their investment; great risks must be offset by the chance of great rewards. This principle is the fundamental one in determining interest rates, and it is illustrated by the fact that_____

- A. successful investors are distinguished by an ability to make very risky investments without worrying about their money
- B. lenders receive higher interest rates on unsecured loans than on loans backed by collateral
- C. in times of high inflation, the interest paid to depositors by banks can actually be below the rate of inflation
- D. at any one time, a commercial bank will have a single rate of interest that it will expect all of its individual borrowers to pay
- E. the potential return on investment in a new company is typically lower than the potential return on investment in a well-established company

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 438

A famous singer recently won a lawsuit against an advertising firm for using another singer in a commercial to evoke the famous singer's well-known rendition of a certain song. As a result of the lawsuit, advertising firms will stop using imitators in commercials. Therefore, advertising costs will rise, since famous singers' services cost more than those of their imitators. The conclusion above is based on which of the following assumptions?

- A. Most people are unable to distinguish a famous singer's rendition of a song from a good imitator's rendition of the same song.
- B. Commercials using famous singers are usually more effective than commercials using imitators of famous singers.
- C. The original versions of some well-known songs are unavailable for use in commercials.
- D. Advertising firms will continue to use imitators to mimic the physical mannerisms of famous singers.
- E. The advertising industry will use well-known renditions of songs in commercials.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 439

A certain mayor has proposed a fee of five dollars per day on private vehicles entering the city, claiming that the fee will alleviate the city's traffic congestion. The mayor reasons that, since the fee will exceed the cost of round-trip bus fare from many nearby points, many people will switch from using their cars to using the bus.

Which of the following statements, if true, provides the best evidence that the mayor's reasoning is flawed?

- A. Projected increases in the price of gasoline will increase the cost of taking a private vehicle into the city.
- B. The cost of parking fees already makes it considerably more expensive for most people to take a private vehicle into the city than to take a bus.
- C. Most of the people currently riding the bus do not own private vehicles.
- D. Many commuters opposing the mayor's plan have indicated that they would rather endure traffic congestion than pay a five-dollar-per day fee.
- E. During the average workday, private vehicles owned and operated by people living within the city account for twenty percent of the city's traffic congestion.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 440

A group of children of various ages was read stories in which people caused harm, some of those people doing so intentionally, and some accidentally. When asked about appropriate punishments for those who had caused harm, the younger children, unlike the older ones, assigned punishments that did not vary according to whether the harm was done intentionally or accidentally. Younger children, then, do not regard people's intentions as relevant to punishment. Which of the following, if true, would most seriously weaken the conclusion above?

- A. In interpreting these stories, the listeners had to draw on a relatively mature sense of human psychology in order to tell whether harm was produced intentionally or accidentally.
- B. In these stories, the severity of the harm produced was clearly stated.
- C. Younger children are as likely to produce harm unintentionally as are older children.
- D. The older children assigned punishment in a way that closely resembled the way adults had assigned punishment in a similar experiment.
- E. The younger children assigned punishments that varied according to the severity of the harm done by the agents in the stories.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 441

When hypnotized subjects are told that they are deaf and are then asked whether they can hear the hypnotist, they reply, "No." Some theorists try to explain this result by arguing that the selves of hypnotized subjects are dissociated into separate parts, and that the part that is deaf is dissociated from the part that replies.

Which of the following challenges indicates the most serious weakness in the attempted explanation described above?

- A. Why does the part that replies not answer, "Yes"?
- B. Why are the observed facts in need of any special explanation?
- C. Why do the subjects appear to accept the hypnotist's suggestion that they are deaf?
- D. Why do hypnotized subjects all respond the same way in the situation described?
- E. Why are the separate parts of the self the same for all subjects?

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 442

The program to control the entry of illegal drugs into the country was a failure in 1987. If the program had been successful, the wholesale price of most illegal drugs would not have dropped substantially in 1987.

The argument in the passage depends on which of the following assumptions?

- A. The supply of illegal drugs dropped substantially in 1987.
- B. The price paid for most illegal drugs by the average consumer did not drop substantially in 1987.
- C. Domestic production of illegal drugs increased at a higher rate than did the entry of such drugs into the country.
- D. The wholesale price of a few illegal drugs increased substantially in 1987.
- E. A drop in demand for most illegal drugs in 1987 was not the sole cause of the drop in their wholesale price.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 443

The program to control the entry of illegal drugs into the country was a failure in 1987. If the program had been successful, the wholesale price of most illegal drugs would not have dropped substantially in 1987.

The argument in the passage would be most seriously weakened if it were true that

- A. in 1987 smugglers of illegal drugs, as a group, had significantly more funds at their disposal than did the country's customs agents
- B. domestic production of illegal drugs increased substantially in 1987
- C. the author's statements were made in order to embarrass the officials responsible for the drug- control program
- D. in 1987 illegal drugs entered the country by a different set of routes than they did in 1986

E. the country's citizens spent substantially more money on illegal drugs in 1987 than they did in 1986

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 444

Excavation of the ancient city of Kourion on the island of Cyprus revealed a pattern of debris and collapsed buildings typical of towns devastated by earthquakes. Archaeologists have hypothesized that the destruction was due to a major earthquake known to have occurred near the island in A.D. 365. Which of the following, if true, most strongly supports the archaeologists' hypothesis?

- A. Bronze ceremonial drinking vessels that are often found in graves dating from years preceding and following A.D. 365 were also found in several graves near Kourion.
- B. No coins minted after A.D. 365 were found in Kourion, but coins minted before that year were found in abundance.
- C. Most modern histories of Cyprus mention that an earthquake occurred near the island in A.D. 365.
- D. Several small statues carved in styles current in Cyprus in the century between A.D. 300 and 400 were found in Kourion.
- E. Stone inscriptions in a form of the Greek alphabet that was definitely used in Cyprus after A.D. 365 were found in Kourion.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 445

Sales of telephones have increased dramatically over the last year. In order to take advantage of this increase, Mammoth Industries plans to expand production of its own model of telephone, while continuing its already very extensive advertising of this product. Which of the following, if true, provides most support for the view that Mammoth Industries cannot increase its sales of telephones by adopting the plan outlined above?

- A. Although it sells all of the telephones that it produces, Mammoth Industries' share of all telephone sales has declined over the last year.
- B. Mammoth Industries' average inventory of telephones awaiting shipment to retailers has declined slightly over the last year.
- C. Advertising has made the brand name of Mammoth Industries' telephones widely known, but few consumers know that Mammoth Industries owns this brand.
- D. Mammoth Industries' telephone is one of three brands of telephone that have together accounted for the bulk of the last year's increase in sales.
- E. Despite a slight decline in the retail price, sales of Mammoth Industries' telephones have fallen in the last year.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 446

Many institutions of higher education suffer declining enrollments during periods of economic slowdown. At two-year community colleges, however, enrollment figures boom during these periods when many people have less money and there is more competition for jobs. Each of the following, if true, helps to explain the enrollment increases in two-year community colleges described above EXCEPT:

- A. During periods of economic slowdown, two-year community colleges are more likely than four-year colleges to prepare their students for the jobs that are still available.
- B. During periods of economic prosperity, graduates of two-year community colleges often continue their studies at four-year colleges.
- C. Tuition at most two-year community colleges is a fraction of that at four-year colleges.
- D. Two-year community colleges devote more resources than do other colleges to attracting those students especially affected by economic slowdowns.
- E. Students at two-year community colleges, but not those at most four-year colleges, can control the cost of their studies by choosing the number of courses they take each term.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 447

Hardin argued that grazing land held in common (that is, open to any user) would always be used less carefully than private grazing land. Each rancher would be tempted to overuse common land because the benefits would accrue to the individual, while the costs of reduced land quality that results from overuse would be spread among all users. But a study comparing 217 million acres of common grazing land with 433 million acres of private grazing land showed that the common land was in better condition.

The answer to which of the following questions would be most useful in evaluating the significance, in relation to Hardin's claim, of the study described above?

- A. Did any of the ranchers whose land was studied use both common and private land?
- B. Did the ranchers whose land was studied tend to prefer using common land over using private land for grazing?
- C. Was the private land that was studied of comparable quality to the common land before either was used for grazing?
- D. Were the users of the common land that was studied at least as prosperous as the users of the private land?
- E. Were there any owners of herds who used only common land, and no private land, for grazing?

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 448

Hardin argued that grazing land held in common (that is, open to any user) would always be used less carefully than private grazing land. Each rancher would be tempted to overuse common land because the benefits would accrue to the individual, while the costs of reduced land quality that results from overuse would be spread among all users. But a study comparing 217 million acres of common grazing land with 433 million acres of private grazing land showed that the common land was in better condition.

Which of the following, if true, and known by the ranchers, would best help explain the results of the study?

- A. With private grazing land, both the costs and the benefits of overuse fall to the individual user.
- B. The cost in reduced land quality that is attributable to any individual user is less easily measured with common land than it is with private land.
- C. An individual who overuses common grazing land might be able to achieve higher returns than other users can, with the result that he or she would obtain a competitive advantage.
- D. If one user of common land overuses it even slightly, the other users are likely to do so even more, with the consequence that the costs to each user outweigh the benefits.
- E. There are more acres of grazing land held privately than there are held in common.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 449

In tests for pironoma, a serious disease, a false positive result indicates that people have pironoma when, in fact, they do not; a false negative result indicates that people do not have pironoma when, in fact, they do. To detect pironoma most accurately, physicians should use the laboratory test that has the lowest proportion of false positive results.

Which of the following, if true, gives the most support to the recommendation above?

- A. The accepted treatment for pironoma does not have damaging side effects.
- B. The laboratory test that has the lowest proportion of false positive results causes the same minor side effects as do the other laboratory tests used to detect pironoma.
- C. In treating pironoma patients, it is essential to begin treatment as early as possible, since even a week of delay can result in loss of life.
- D. The proportion of inconclusive test results is equal for all laboratory tests used to detect pironoma.

E. All laboratory tests to detect pironoma have the same proportion of false negative results.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 450

Companies O and P each have the same number of employees who work the same number of hours per week. According to records maintained by each company, the employees of Company O had fewer job- related accidents last year than did the employees of Company P. Therefore, employees of Company O are less likely to have job-related accidents than are employees of Company P. Which of the following, if true, would most strengthen the conclusion above?

- A. Company P manufactures products that are more hazardous for workers to produce than does Company O.
- B. Company P holds more safety inspections than does Company O.
- C. Company P maintains a more modern infirmary than does Company O.
- D. Company O paid more for new job-related medical claims than did Company P.
- E. Company P provides more types of health-care benefits than does Company O.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 451

Companies O and P each have the same number of employees who work the same number of hours per week. According to records maintained by each company, the employees of Company O had fewer job- related accidents last year than did the employees of Company P. Therefore, employees of Company O are less likely to have job-related accidents than are employees of Company P. Which of the following, if true, would most weaken the conclusion above?

- A. The employees of Company P lost more time at work due to job-related accidents than did the employees of Company O.
- B. Company P considered more types of accidents to be job-related than did Company O.
- C. The employees of Company P were sick more often than were the employees of Company O.
- D. Several employees of Company O each had more than one job-related accident.
- E. The majority of job-related accidents at Company O involved a single machine.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 452

In comparison to the standard typewriter keyboard, the EFCO keyboard, which places the most-used keys nearest the typist's strongest fingers, allows faster typing and results in less fatigue. Therefore, replacement of standard keyboards with the EFCO keyboard will result in an immediate reduction of typing costs.

Which of the following, if true, would most weaken the conclusion drawn above?

- A. People who use both standard and EFCO keyboards report greater difficulty in the transition from the EFCO keyboard to the standard keyboard than in the transition from the standard keyboard to the EFCO keyboard.
- B. EFCO keyboards are no more expensive to manufacture than are standard keyboards and require less frequent repair than do standard keyboards.
- C. The number of businesses and government agencies that use EFCO keyboards is increasing each year.
- D. The more training and experience an employee has had with the standard keyboard, the more costly it is to train that employee to use the EFCO keyboard.
- E. Novice typists can learn to use the EFCO keyboard in about the same amount of time it takes them to learn to use the standard keyboard.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 453

Half of the subjects in an experiment--the experimental group--consumed large quantities of a popular artificial sweetener. Afterward, this group showed lower cognitive abilities than did the other half of the subjects--the control group--who did not consume the sweetener. The detrimental effects were attributed to an amino acid that is one of the sweetener's principal constituents. Which of the following, if true, would best support the conclusion that some ingredient of the sweetener was responsible for the experimental results?

- A. Most consumers of the sweetener do not consume as much of it as the experimental group members did.
- B. The amino acid referred to in the conclusion is a component of all proteins, some of which must be consumed for adequate nutrition.
- C. The quantity of the sweetener consumed by individuals in the experimental group is considered safe by federal food regulators.
- D. The two groups of subjects were evenly matched with regard to cognitive abilities prior to the experiment.
- E. A second experiment in which subjects consumed large quantities of the sweetener lacked a control group of subjects who were not given the sweetener.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 454

Half of the subjects in an experiment--the experimental group--consumed large quantities of a popular artificial sweetener. Afterward, this group showed lower cognitive abilities than did the other half of the subjects--the control group--who did not consume the sweetener. The detrimental effects were attributed to an amino acid that is one of the sweetener's principal constituents. Which of the following, if true, would best help explain how the sweetener might produce the observed effect?

- A. The government's analysis of the artificial sweetener determined that it was sold in relatively pure form.
- B. A high level of the amino acid in the blood inhibits the synthesis of a substance required for normal brain functioning.
- C. Because the sweetener is used primarily as a food additive, adverse reactions to it are rarely noticed by consumers.
- D. The amino acid that is a constituent of the sweetener is also sold separately as a dietary supplement.
- E. Subjects in the experiment did not know whether they were consuming the sweetener or a second, harmless substance.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 455

Adult female rats who have never before encountered rat pups will start to show maternal behaviors after being confined with a pup for about seven days. This period can be considerably shortened by disabling the female's sense of smell or by removing the scent-producing glands of the pup. Which of the following hypotheses best explains the contrast described above?

- A. The sense of smell in adult female rats is more acute than that in rat pups.
- B. The amount of scent produced by rat pups increases when they are in the presence of a female rat that did not bear them.
- C. Female rats that have given birth are more affected by olfactory cues than are female rats that have never given birth.
- D. A female rat that has given birth shows maternal behavior toward rat pups that she did not bear more quickly than does a female rat that has never given birth.
- E. The development of a female rat's maternal interest in a rat pup that she did not bear is inhibited by the odor of the pup.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 456

The interview is an essential part of a successful hiring program because, with it, job applicants who have personalities that are unsuited to the requirements of the job will be eliminated from consideration.

The argument above logically depends on which of the following assumptions?

- A. A hiring program will be successful if it includes interviews.
- B. The interview is a more important part of a successful hiring program than is the development of a job description.
- C. Interviewers can accurately identify applicants whose personalities are unsuited to the requirements of the job.
- D. The only purpose of an interview is to evaluate whether job applicants' personalities are suited to the requirements of the job.
- E. The fit of job applicants' personalities to the requirements of the job was once the most important factor in making hiring decisions.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 457

An overly centralized economy, not the changes in the climate, is responsible for the poor agricultural production in Country X since its new government came to power. Neighboring Country Y has experienced the same climatic conditions, but while agricultural production has been falling in Country X, it has been rising in Country Y.

Which of the following, if true, would most weaken the argument above?

- A. Industrial production also is declining in Country X.
- B. Whereas Country Y is landlocked, Country X has a major seaport.
- C. Both Country X and Country Y have been experiencing drought conditions.
- D. The crops that have always been grown in Country X are different from those that have always been grown in Country Y.
- E. Country X's new government instituted a centralized economy with the intention of ensuring an equitable distribution of goods.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 458

Useful protein drugs, such as insulin, must still be administered by the cumbersome procedure of injection under the skin. If proteins are taken orally, they are digested and cannot reach their target cells. Certain nonprotein drugs, however, contain chemical bonds that are not broken down by the digestive system. They can, thus, be taken orally.

The statements above most strongly support a claim that a research procedure that successfully accomplishes which of the following would be beneficial to users of protein drugs?

- A. Coating insulin with compounds that are broken down by target cells, but whose chemical bonds are resistant to digestion
- B. Converting into protein compounds, by procedures that work in the laboratory, the nonprotein drugs that resist digestion
- C. Removing permanently from the digestive system any substances that digest proteins
- D. Determining, in a systematic way, what enzymes and bacteria are present in the normal digestive system and whether they tend to be broken down within the body
- E. Determining the amount of time each nonprotein drug takes to reach its target cells

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 459

Country Y uses its scarce foreign-exchange reserves to buy scrap iron for recycling into steel. Although the steel thus produced earns more foreign exchange than it costs, that policy is foolish. Country Y's own territory has vast deposits of iron ore, which can be mined with minimal expenditure of foreign exchange.

Which of the following, if true, provides the strongest support for Country Y's policy of buying scrap iron abroad?

- A. The price of scrap iron on international markets rose significantly in 1987.
- B. Country Y's foreign-exchange reserves dropped significantly in 1987.
- C. There is virtually no difference in quality between steel produced from scrap iron and that produced from iron ore.
- D. Scrap iron is now used in the production of roughly half the steel used in the world today, and experts predict that scrap iron will be used even more extensively in the future.
- E. Furnaces that process scrap iron can be built and operated in Country Y with substantially less foreign exchange than can furnaces that process iron ore.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 460

Last year the rate of inflation was 1.2 percent, but for the current year it has been 4 percent. We can conclude that inflation is on an upward trend and the rate will be still higher next year. Which of the following, if true, most seriously weakens the conclusion above?

- A. The inflation figures were computed on the basis of a representative sample of economic data rather than all of the available data.
- B. Last year a dip in oil prices brought inflation temporarily below its recent stable annual level of 4 percent.
- C. Increases in the pay of some workers are tied to the level of inflation, and at an inflation rate of 4 percent or above, these pay raises constitute a force causing further inflation.
- D. The 1.2 percent rate of inflation last year represented a ten-year low.
- E. Government intervention cannot affect the rate of inflation to any significant degree.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 461

Because no employee wants to be associated with bad news in the eyes of a superior, information about serious problems at lower levels is progressively softened and distorted as it goes up each step in the management hierarchy. The chief executive is, therefore, less well informed about problems at lower levels than are his or her subordinates at those levels. The conclusion drawn above is based on the assumption that

- A. problems should be solved at the level in the management hierarchy at which they occur
- B. employees should be rewarded for accurately reporting problems to their superiors
- C. problem-solving ability is more important at higher levels than it is at lower levels of the management hierarchy
- D. chief executives obtain information about problems at lower levels from no source other than their subordinates
- E. some employees are more concerned about truth than about the way they are perceived by their superiors

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 462

In the United States in 1986, the average rate of violent crime in states with strict gun-control laws was 645 crimes per 100,000 persons--about 50 percent higher than the average rate in the eleven states where strict gun-control laws have never been passed. Thus one way to reduce violent crime is to repeal strict gun control laws.

Which of the following, if true, would most weaken the argument above?

- A. The annual rate of violent crime in states with strict gun-control laws has decreased since the passage of those laws.
- B. In states with strict gun-control laws, few individuals are prosecuted for violating such laws.
- C. In states without strict gun-control laws, many individuals have had no formal training in the use of firearms.
- D. The annual rate of nonviolent crime is lower in states with strict gun-control laws than in states without such laws.
- E. Less than half of the individuals who reside in states without strict gun-control laws own a gun.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 463

Corporate officers and directors commonly buy and sell, for their own portfolios, stock in their own corporations. Generally, when the ratio of such inside sales to inside purchases falls below 2 to 1 for a given stock, a rise in stock prices is imminent. In recent days, while the price of MEGA Corporation stock has been falling, the corporation's officers and directors have bought up to nine times as much of it as they have sold. The facts above best support which of the following predictions?

- A. The imbalance between inside purchases and inside sales of MEGA stock will grow even further.
- B. Inside purchases of MEGA stock are about to cease abruptly.
- C. The price of MEGA stock will soon begin to go up.
- D. The price of MEGA stock will continue to drop, but less rapidly.
- E. The majority of MEGA stock will soon be owned by MEGA's own officers and directors.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 464

The proposal to hire ten new police officers in Middletown is quite foolish. There is sufficient funding to pay the salaries of the new officers, but not the salaries of additional court and prison employees to process the increased caseload of arrests and convictions that new officers usually generate. Which of the following, if true, will most seriously weaken the conclusion drawn above?

- A. Studies have shown that an increase in a city's police force does not necessarily reduce crime.

- B. When one major city increased its police force by 19 percent last year, there were 40 percent more arrests and 13 percent more convictions.
- C. If funding for the new police officers' salaries is approved, support for other city services will have to be reduced during the next fiscal year.
- D. In most United States cities, not all arrests result in convictions, and not all convictions result in prison terms.
- E. Middletown's ratio of police officers to citizens has reached a level at which an increase in the number of officers will have a deterrent effect on crime.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 465

A recent report determined that although only three percent of drivers on Maryland highways equipped their vehicles with radar detectors, thirty-three percent of all vehicles ticketed for exceeding the speed limit were equipped with them. Clearly, drivers who equip their vehicles with radar detectors are more likely to exceed the speed limit regularly than are drivers who do not. The conclusion drawn above depends on which of the following assumptions?

- A. Drivers who equip their vehicles with radar detectors are less likely to be ticketed for exceeding the speed limit than are drivers who do not.
- B. Drivers who are ticketed for exceeding the speed limit are more likely to exceed the speed limit regularly than are drivers who are not ticketed.
- C. The number of vehicles that were ticketed for exceeding the speed limit was greater than the number of vehicles that were equipped with radar detectors.
- D. Many of the vehicles that were ticketed for exceeding the speed limit were ticketed more than once in the time period covered by the report.
- E. Drivers on Maryland highways exceeded the speed limit more often than did drivers on other state highways not covered in the report.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 466

There is a great deal of geographical variation in the frequency of many surgical procedures--up to tenfold variation per hundred thousand between different areas in the numbers of hysterectomies, prostatectomy's, and tonsillectomies. To support a conclusion that much of the variation is due to unnecessary surgical procedures, it would be most important to establish which of the following?

- A. A local board of review at each hospital examines the records of every operation to determine whether the surgical procedure was necessary.

- B. The variation is unrelated to factors (other than the surgical procedures themselves) that influence the incidence of diseases for which surgery might be considered.
- C. There are several categories of surgical procedure (other than hysterectomies, prostatectomy's, and tonsillectomies) that are often performed unnecessarily.
- D. For certain surgical procedures, it is difficult to determine after the operation whether the procedures were necessary or whether alternative treatment would have succeeded.
- E. With respect to how often they are performed unnecessarily, hysterectomies, prostatectomy's, and tonsillectomies are representative of surgical procedures in general.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 467

Researchers have found that when very overweight people, who tend to have relatively low metabolic rates, lose weight primarily through dieting, their metabolisms generally remain unchanged. They will thus burn significantly fewer calories at the new weight than do people whose weight is normally at that level. Such newly thin persons will, therefore, ultimately regain weight until their body size again matches their metabolic rate.

The conclusion of the argument above depends on which of the following assumptions?

- A. Relatively few very overweight people who have dieted down to a new weight tend to continue to consume substantially fewer calories than do people whose normal weight is at that level.
- B. The metabolisms of people who are usually not overweight are much more able to vary than the metabolisms of people who have been very overweight.
- C. The amount of calories that a person usually burns in a day is determined more by the amount that is consumed that day than by the current weight of the individual.
- D. Researchers have not yet determined whether the metabolic rates of formerly very overweight individuals can be accelerated by means of chemical agents.
- E. Because of the constancy of their metabolic rates, people who are at their usual weight normally have as much difficulty gaining weight as they do losing it.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 468

In 1987 sinusitis was the most common chronic medical condition in the United States, followed by arthritis and high blood pressure, in that order. The incidence rates for both arthritis and high blood pressure increase with age, but the incidence rate for sinusitis is the same for people of all ages. The average age of the United States population will increase between 1987 and 2000. Which of the following conclusions can be most properly drawn about chronic medical conditions in the United States from the information given above?

- A. Sinusitis will be more common than either arthritis or high blood pressure in 2000.
- B. Arthritis will be the most common chronic medical condition in 2000.
- C. The average age of people suffering from sinusitis will increase between 1987 and 2000.
- D. Fewer people will suffer from sinusitis in 2000 than suffered from it in 1987.
- E. A majority of the population will suffer from at least one of the medical conditions mentioned above by the year 2000.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 469

Parasitic wasps lay their eggs directly into the eggs of various host insects in exactly the right numbers for any suitable size of host egg. If they laid too many eggs in a host egg, the developing wasp larvae would compete with each other to the death for nutrients and space. If too few eggs were laid, portions of the host egg would decay, killing the wasp larvae.

Which of the following conclusions can properly be drawn from the information above?

- A. The size of the smallest host egg that a wasp could theoretically parasitize can be determined from the wasp's egg-laying behavior.
- B. Host insects lack any effective defenses against the form of predation practiced by parasitic wasps.
- C. Parasitic wasps learn from experience how many eggs to lay into the eggs of different host species.
- D. Failure to lay enough eggs would lead to the death of the developing wasp larvae more quickly than would laying too many eggs.
- E. Parasitic wasps use visual clues to calculate the size of a host egg.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 470

In 1985 in the country of Alissia, farmers brought to market a broccoli crop that was one-and-a-half times as large as the 1985 broccoli crop in its neighbor country, Barbera. Yet total quantities of broccoli available for sale to consumers in Alissia were smaller than were total quantities in Barbera in 1985.

Which of the following, if true, in 1985, contributes most to an explanation of why there was less broccoli available for sale to consumers in Alissia than in Barbera?

- A. Barbera's farmers produced much more cabbage than did Alissia's farmers.
- B. Barbera's farmers produced fewer heads of broccoli per acre than did Alissia's farmers.
- C. Alissia exported a much higher proportion of its broccoli crop than did Barbera.
- D. Broccoli was much more popular among consumers in Alissia than in Barbera.
- E. Alissia had more land suitable for growing broccoli than did Barbera.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 471

A manufacturer of men's dress socks sought to increase profits by increasing sales. The size of its customer pool was remaining steady, with the average customer buying twelve pairs of dress socks per year. The company's plan was to increase the number of promotional discount-sale periods to one every six months.

Which of the following, if it is a realistic possibility, casts the most serious doubt on the viability of the company's plan?

- A. New manufacturing capacity would not be required if the company were to increase the number of pairs of socks sold.
- B. Inventory stocks of merchandise ready for sale would be high preceding the increase in the number of discount-sale periods.
- C. The manufacturer's competitors would match its discounts during sale periods, and its customers would learn to wait for those times to make their purchases.
- D. New styles and colors would increase customers' consciousness of fashion in dress socks, but the customers' requirements for older styles and colors would not be reduced.
- E. The cost of the manufacturer's raw materials would remain steady, and its customers would have more disposable income.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 472

Previous studies have indicated that eating chocolate increases the likelihood of getting heart disease. However, a new, more reliable study has indicated that eating chocolate does not increase the likelihood of getting heart disease. When the results of the new study become known, consumption

of chocolate will undoubtedly increase.

Which of the following is an assumption on which the conclusion above is based?

- A. Most people who eat a great deal of chocolate will not get heart disease.
- B. Although they believe that eating chocolate increases the likelihood of getting heart disease, some people still eat as much chocolate as they want.
- C. People who have heard that eating chocolate increases the likelihood of getting heart disease do not believe it.
- D. There are people who currently eat as much chocolate as they want because they have not heard that eating chocolate increases the likelihood of getting heart disease.
- E. There are people who currently limit their consumption of chocolate only because they believe that eating chocolate increases the likelihood of getting heart disease.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 473

The fossil record shows that the climate of North America warmed and dried at the end of the Pleistocene period. Most of the species of large mammals then living on the continent became extinct, but the smaller mammalian species survived.

Which of the following, if true, provides the best basis for an explanation of the contrast described above between species of large mammals and species of small mammals?

- A. Individual large mammals can, in general, travel further than small mammals and so are more able to migrate in search of a hospitable environment.
- B. The same pattern of comparative success in smaller, as opposed to larger, species that is observed in mammals is also found in bird species of the same period.
- C. The fossil record from the end of Pleistocene period is as clear for small mammals as it is for large mammals.
- D. Larger mammals have greater food and space requirements than smaller mammals and are thus less able to withstand environmental change.
- E. Many more of the species of larger mammals than of the species of smaller mammals living in North America in that period had originated in climates that were warmer than was that of North America before the end of the Pleistocene period.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 474

Bonuses at DSR Industries cannot be awarded unless profits exceed a ten percent return on stockholders' investments in the company. Higher profits

mean higher bonuses. Therefore, bonuses in a year of general economic recession will be considerably lower than bonuses in a year of peak profits at DSR.

The conclusion above depends on the assumption that

- A. the firm will have relatively low profits in recession years
- B. the amount represented by a ten percent return on stockholders' investments in the company will increase from year to year
- C. profits rarely exceed a ten percent return on stockholders' investments in the company
- D. profits in excess of a ten percent return on stockholders' investments in the company are all distributed in the form of bonuses
- E. bonuses at DSR never drop to zero

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 475

Which of the following, if true, is the most logical completion of the argument below? The tax system of the Republic of Grootland encourages borrowing by granting its taxpayers tax relief for interest paid on loans. The system also discourages saving by taxing any interest earned on savings. Nevertheless, it is clear that Grootland's tax system does not consistently favor borrowing over saving, for if it did, there would be no_____

- A. tax relief in Grootland for those portions of a taxpayer's income, if any, that are set aside to increase that taxpayer's total savings
- B. tax relief in Grootland for the processing fees that taxpayers pay to lending institutions when obtaining certain kinds of loans
- C. tax relief in Grootland for interest that taxpayers are charged on the unpaid balance in credit card accounts
- D. taxes due in Grootland on the cash value of gifts received by taxpayers from banks trying to encourage people to open savings accounts
- E. taxes due in Grootland on the amount that a taxpayer has invested in interest-bearing savings accounts

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 476

Suitable habitats for gray wolves have greatly diminished in area. In spite of this fact, the most sensible course would be to refrain from reestablishing gray wolves in places where previously they have been hunted out of existence. Striving to bring back these animals to places where they will only face lethal human hostility is immoral.

The argument above depends on

- A. an appeal to an authority
- B. a belief that gray wolves are dangerous to human beings and livestock
- C. an assumption that two events that occur together must be causally connected
- D. an assumption that the future will be like the past
- E. a threat of violence against those persons presenting the opposing view

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 477

The argument above would be most significantly weakened if which of the following were true?

- A. Effective laws against the hunting of gray wolves have been enacted.
- B. Ranchers, farmers, and hunters still have an ingrained bias against gray wolves.
- C. By the 1930's bounty hunters had exterminated most of the gray wolves in the United States.
- D. Programs for increasing the gray wolf population are not aided by federal laws that require the licensing of hunters of certain predators.
- E. Suggested programs for increasing the gray wolf population have been criticized by environmentalists and biologists.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 478

For the safety-conscious Swedish market, a United States manufacturer of desktop computers developed a special display screen that produces a much weaker electromagnetic field surrounding the user than do ordinary screens. Despite an advantage in this respect over its competitors, the manufacturer is introducing the screen into the United States market without advertising it as a safety improvement.

Which of the following, if true, provides a rationale for the manufacturer's approach to advertising the screen in the United States?

- A. Many more desktop computers are sold each year in the United States market than are sold in the Swedish market.
- B. The manufacturer does not want its competitors to become aware of the means by which the company has achieved this advance in technology.
- C. Most business and scientific purchasers of desktop computers expect to replace such equipment eventually as better technology becomes available on the market.
- D. An emphasis on the comparative safety of the new screen would call into question the safety of the many screens the manufacturer has already sold

in the United States.

E. Concern has been expressed in the United States over the health effects of the large electromagnetic fields surrounding electric power lines.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 479

In the suburbs surrounding Middletown, there is an average of 2.4 automobiles per family, and thus very few suburban residents use public buses. The suburban communities, therefore, would derive little benefit from continuing to subsidize the portion of Middletown's public bus system that serves the suburbs.

Which of the following, if true, casts the most serious doubt on the conclusion drawn above?

- A. The real-estate tax rate in Middletown is higher than it is in the suburbs.
- B. Last year voters in the suburban communities defeated by a narrow margin a bill designed to increase subsidies for public bus routes.
- C. Many suburban shops can attract enough employees to remain in business only because subsidized public transportation from Middletown is available.
- D. Public buses operated with less than a 35 percent occupancy rate produce more pollution per passenger mile than would the operation of private automobiles for each passenger.
- E. Most voters in Middletown's suburban communities are unwilling to continue subsidies for public buses next year if rider ship on those buses drops below current levels.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 480

Any tax relief received by the solar industry would not benefit the homeowner who installs a solar-energy system. Even though homeowners would pay a lower price for solar-energy system installations because of this tax relief, with the government paying the balance, government revenues come from the public.

The argument above is based on which of the following assumptions?

- A. The tax relief would cause the homeowner to lose, through taxes or reduced government benefits or both, an amount at least equal to the reduction in the price of that homeowner's solar-energy system installation.
- B. The tax relief that would be received by solar-energy industries would not be offered at the same time as any tax relief for other industries.

- C. Advertisements of the solar-energy industry, by failing to identify the source of government revenues explicitly to the public, mask the advantage the industry receives from the public.
- D. Homeowners generally believe that they benefit from any tax relief offered to the solar-energy industry.
- E. Tax relief would encourage solar industries to sell solar-energy systems at higher prices.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 481

Less than 50 percent of a certain tropical country's wildlands remains intact. Efforts are under way to restore biological diversity in that country by restoring some destroyed wild habitats and extending some relatively intact portions of forests. However, opponents argue that these efforts are not needed because there is still plenty of wild land left.

Which of the following, if true, most significantly weakens the argument of the opponents of conservation efforts?

- A. As much, if not more, effort is required to restore a wild habitat as to preserve an intact habitat.
- B. The opponents of restoration efforts are, for the most part, members of the wealthier classes in their own villages and cities.
- C. Existing conservation laws have been very effective in preserving biological diversity within the wildlands that remain intact.
- D. For many tropical species native to that country, the tropical wildlands that are still relatively intact do not provide appropriate habitats for reproduction.
- E. If a suitable population of plants and animals is introduced and is permitted to disperse and grow, tropical habitats can most certainly be restored.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 482

A study comparing a group of chronically depressed individuals with an otherwise matched group of individuals free from depression found significantly more disorders of the immune system among the depressed group. According to the researchers, these results strongly support the hypothesis that mental states influence the body's vulnerability to infection.

Which of the following, if true, casts the most serious doubt on the researchers' interpretation of their findings?

- A. The researchers' view does little more than echo a familiar theme in folklore and literature.
- B. Chronically depressed individuals are no less careful than others to avoid exposure to infections.

- C. Disorders of the immune system cause many of those individuals who have them to become chronically depressed.
- D. Individuals who have previously been free from depression can become depressed quite suddenly.
- E. A high frequency of infections can stem from an unusually high level of exposure rather than from any disorder of the immune system.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 483

Exports of United States wood pulp will rise considerably during this year. The reason for the rise is that the falling value of the dollar will make it cheaper for paper manufacturers in Japan and Western Europe to buy American wood pulp than to get it from any other source. Which of the following is an assumption made in drawing the conclusion above?

- A. Factory output of paper products in Japan and Western Europe will increase sharply during this year.
- B. The quality of the wood pulp produced in the United States would be adequate for the purposes of Japanese and Western European paper manufacturers.
- C. Paper manufacturers in Japan and Western Europe would prefer to use wood pulp produced in the United States if cost were not a factor.
- D. Demand for paper products made in Japan and Western Europe will not increase sharply during this year.
- E. Production of wood pulp by United States companies will not increase sharply during this year.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 484

A company's personnel director surveyed employees about their satisfaction with the company's system for awarding employee performance ratings. The survey data indicated that employees who received high ratings were very satisfied with the system. The personnel director concluded from these data that the company's best-performing employees liked the system. The personnel director's conclusion assumes which of the following?

- A. No other performance rating system is as good as the current system.
- B. The company's best-performing employees received high ratings.
- C. Employees who received low ratings were dissatisfied with the system.
- D. Employees who receive high ratings from a performance-rating system will like that system.
- E. The company's best-performing employees were motivated to perform well by the knowledge that they would receive performance ratings.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 485

In Argonia the average rate drivers pay for car accident insurance is regulated to allow insurance companies to make a reasonable profit. Under the regulations, the rate any individual driver pays never depends on the actual distance driven by that driver each year. Therefore, Argonians who drive less than average partially subsidize the insurance of those who drive more than average. The conclusion above would be properly drawn if it were also true that in Argonia

- A. the average accident insurance rate for all drivers rises whenever a substantial number of new drivers buy insurance
- B. the average cost to insurance companies of insuring drivers who drive less than the annual average is less than the average cost of insuring drivers who drive more than the annual average
- C. the lower the age of a driver, the higher the insurance rate paid by that driver
- D. insurance company profits would rise substantially if drivers were classified in terms of the actual number of miles they drive each year
- E. drivers who have caused insurance companies to pay costly claims generally pay insurance rates that are equal to or lower than those paid by other drivers

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 486

In the 1970's there was an oversupply of college graduates. The oversupply caused the average annual income of college graduates to fall to a level only 18 percent greater than that of workers with only high school diplomas. By the late 1980's the average annual income of college graduates was 43 percent higher than that of workers with only high school diplomas, even though between the 1970's and the late 1980's the supply of college graduates did not decrease. Which of the following, if true, in the late 1980's, best reconciles the apparent discrepancy described above?

- A. The economy slowed, thus creating a decreased demand for college graduates.
- B. The quality of high school education improved.
- C. Compared to the 1970's, a greater number of high schools offered vocational guidance programs for their students.
- D. The proportion of the population with at least a college-level education increased.
- E. There was for the first time in 20 years an oversupply of job seekers with only high school diplomas.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 487

Working shorter workweeks causes managers to feel less stress than does working longer workweeks. In addition, greater perceived control over one's work life reduces stress levels. It can be concluded, therefore, that shorter workweeks cause managers to feel they have more control over their work life. The argument made above uses which of the following questionable techniques?

- A. Associating two conditions as cause and effect on the basis of their being causally associated with the same phenomenon
- B. Taking for granted that two factors that have a certain effect individually produce that effect more strongly when both act together
- C. Assuming what it sets out to prove
- D. Using an irrelevant point in order to draw a conclusion
- E. Basing a conclusion on preconceived views about the needs of managers

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 488

There are fundamentally two possible changes in an economy that will each cause inflation unless other compensating changes also occur. These changes are either reductions in the supply of goods and services or increases in demand. In a prebanking economy the quantity of money available, and hence the level of demand, is equivalent to the quantity of gold available. If the statements above are true, then it is also true that in a prebanking economy

- A. any inflation is the result of reductions in the supply of goods and services
- B. if other factors in the economy are unchanged, increasing the quantity of gold available will lead to inflation
- C. if there is a reduction in the quantity of gold available, then, other things being equal, inflation must result
- D. the quantity of goods and services purchasable by a given amount of gold is constant
- E. whatever changes in demand occur, there will be compensating changes in the supply of goods and services

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:**QUESTION 489**

Industrialists from the country Distopia were accused of promoting the Distopian intervention in the Arcadian civil war merely to insure that the industrialists' facilities in Arcadia made substantial profits during the war. Yet this cannot be the motive since, as the Distopians foresaw, Distopia's federal expenses for the intervention were eight billion dollars, whereas, during the war, profits from the Distopian industrialists' facilities in Arcadia totaled only four billion dollars. Which of the following, if true, exposes a serious flaw in the argument made in the second sentence above?

- A. During the Arcadian war, many Distopian industrialists with facilities located in Arcadia experienced a significant rise in productivity in their facilities located in Distopia.
- B. The largest proportion of Distopia's federal expenses is borne by those who receive no significant industrial profits.
- C. Most Distopian industrialists' facilities located in Arcadia are expected to maintain the level of profits they achieved during the war.
- D. Distopian industrialists' facilities in Arcadia made substantial profits before the events that triggered the civil war.
- E. Many Distopians expressed concern over the suffering that Arcadians underwent during the civil war.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:**QUESTION 490**

In the United States, injuries to passengers involved in automobile accidents are typically more severe than in Europe, where laws require a different kind of safety belt. It is clear from this that the United States needs to adopt more stringent standards for safety belt design to protect automobile passengers better.

Each of the following, if true, weakens the argument above EXCEPT:

- A. Europeans are more likely to wear safety belts than are people in the United States.
- B. Unlike United States drivers, European drivers receive training in how best to react in the event of an accident to minimize injuries to themselves and to their passengers.
- C. Cars built for the European market tend to have more sturdy construction than do cars built for the United States market.
- D. Automobile passengers in the United States have a greater statistical chance of being involved in an accident than do passengers in Europe.
- E. States that have recently begun requiring the European safety belt have experienced no reduction in the average severity of injuries suffered by passengers in automobile accidents.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 491

The school board has determined that it is necessary to reduce the number of teachers on the staff. Rather than deciding which teachers will be laid off on the basis of seniority, the school board plans to lay off the least effective teachers first.
The school board's plan assumes that

- A. there is a way of determining the effectiveness of teachers
- B. what one individual defines as effective teaching will not be defined as effective teaching by another individual
- C. those with the most experience teaching are the best teachers
- D. those teachers who are paid the most are generally the most qualified
- E. some teachers will be more effective working with some students than with other students

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 492

Since applied scientific research is required for technological advancement, many have rightly urged an increased emphasis in universities on applied research. But we must not give too little attention to basic research, even though it may have no foreseeable application, for tomorrow's applied research will depend on the basic research of today.
If the statements above are true, which of the following can be most reliably inferred?

- A. If future technological advancement is desired, basic research should receive greater emphasis than applied research.
- B. If basic research is valued in universities, applied research should be given less emphasis than it currently has.
- C. If future technological advancement is desired, research should be limited to that with some foreseeable application.
- D. If too little attention is given to basic research today, future technological advancement will be jeopardized.
- E. If technological advancement is given insufficient emphasis, basic research will also receive too little attention.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 493

The First Banking Group's decision to invest in an electronic network for transferring funds was based on a cost advantage over a nonelectronic system of about ten dollars per transaction in using an electronic system. Executives reasoned further that the system would give them an advantage over competitors.

Which of the following, if it is a realistic possibility, most seriously weakens the executives' projection of an advantage over competitors?

- A. The cost advantage of using the electronic system will not increase sufficiently to match the pace of inflation.
- B. Competitors will for the same reasons install electronic systems, and the resulting overcapacity will lead to mutually damaging price wars.
- C. The electronic system will provide a means for faster transfer of funds, if the First Banking Group wishes to provide faster transfer to its customers.
- D. Large banks from outside the area served by the First Banking Group have recently established branches in that area as competitors to the First Banking Group.
- E. Equipment used in the electronic network for transferring funds will be compatible with equipment used in other such networks.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 494

Which of the following best completes the argument below? One effect of the introduction of the electric refrigerator was a collapse in the market for ice. Formerly householders had bought ice to keep their iceboxes cool and the food stored in the iceboxes fresh. Now the iceboxes cool themselves. Similarly, the introduction of crops genetically engineered to be resistant to pests will _____

- A. increase the size of crop harvests
- B. increase the cost of seeds
- C. reduce demand for chemical pesticides
- D. reduce the value of farmland
- E. reduce the number of farmers keeping livestock

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 495

In 1985 the city's Fine Arts Museum sold 30,000 single-entry tickets. In 1986 the city's Folk Arts and Interior Design museums opened, and these three museums together sold over 80,000 such tickets that year. These museums were worth the cost, since more than twice as many citizens are now enjoying the arts.

Which of the following, if true, most seriously weakens the author's assertion that more than twice as many citizens are now enjoying the arts?

- A. Most visitors to one museum also visit the other two.
- B. The cost of building the museums will not be covered by revenues generated by the sale of museum tickets.
- C. As the two new museums become better known, even more citizens will visit them.
- D. The city's Fine Arts Museum did not experience a decrease in single-entry tickets sold in 1986.
- E. Fewer museum entry tickets were sold in 1986 than the museum planners had hoped to sell.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 496

(F) We ought not to test the safety of new drugs on sentient animals, such as dogs and rabbits. Our benefit means their pain, and they are equal to us in the capacity to feel pain. (G) We must carry out such tests; otherwise, we would irresponsibly sacrifice the human lives that could have been saved by the drugs.

Which of the following, if true, is the best objection that could be made from F's point of view to counter G's point?

- A. Even though it is not necessary for people to use cosmetics, cosmetics are also being tested on sentient animals.
- B. Medical science already has at its disposal a great number of drugs and other treatments for serious illnesses.
- C. It is not possible to obtain scientifically adequate results by testing drugs in the test tube, without making tests on living tissue.
- D. Some of the drugs to be tested would save human beings from great pain.
- E. Many tests now performed on sentient animals can be performed equally well on fertilized chicken eggs that are at a very early stage of development.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 497

Which of the following best completes the passage below? The unemployment rate in the United States fell from 7.5 percent in 1981 to 6.9 percent in 1986. It cannot, however, be properly concluded from these statistics that the number of unemployed in 1986 was lower than it had been in 1981 because_____

- A. help-wanted advertisements increased between 1981 and 1986
- B. many of the high-paying industrial jobs available in 1981 were replaced by low-wage service jobs in 1986, resulting in displacements of hundreds of thousands of workers
- C. in someMidwesternindustrial states, the unemployment rate was much higher in 1986 than it had been in 1981
- D. the total available work force, including those with and without employment, increased between 1981 and 1986
- E. the average time that employees stay in any one job dropped during the period 1981 to 1986

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 498

To reduce costs, a company is considering a drastic reduction in the number of middle-level managers. This reduction would be accomplished by first offering early retirement to those 50 years of age or older with 15 years of service, and then by firing enough of the others to bring the overall reduction to 50 percent.

Each of the following, assuming that it is a realistic possibility, is a possible disadvantage to the company of the plan EXCEPT:

- A. Loyalty to the company will be reduced among those surviving the reduction, because they will perceive the status of even good managers as uncertain.
- B. The restructuring of managerial jobs will allow business units to be adapted to fit a changing business environment.
- C. The company will have a smaller pool of managers from which to choose in selecting future senior managers.
- D. Some of the best managers, unsure of their security against being fired, will choose early retirement.
- E. The increased workload of managers remaining with the company will subject them to stress that will eventually affect their performance.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 499

In order to relieve congestion in the airspace near the airports of a certain country, transportation officials propose sending passengers by new rapid trains between the country's major airport and several small cities within a 300-mile radius of it. This plan was proposed even though the officials realized that it is the major airport that is congested, not those in the small cities. The plan to relieve congestion would work best if which of the following were true about the major airport?

- A. Rail tickets between the airport and the small cities will most likely cost more than the current air tickets for those routes.
- B. Most passengers who frequently use the airport prefer to reach their cities of destination exclusively by air, even if they must change planes twice.
- C. There are feasible changes in the airport's traffic control system which would significantly relieve congestion.
- D. Some of the congestion the airport experiences could be relieved if more flights were scheduled at night and at other off-peak hours.
- E. A significant proportion of the airport's traffic consists of passengers transferring between international flights and flights to the small cities.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 500

An annually conducted, nationwide survey shows a continuing marked decline in the use of illegal drugs by high school seniors over the last three years.

Which of the following, if true, casts most doubt on the relevance of the survey results described above for drawing conclusions about illegal drug use in the teen-age population as a whole?

- A. Because of cuts in funding, no survey of illegal drug use by high school seniors will be conducted next year.
- B. The decline uncovered in the survey has occurred despite the decreasing cost of illegal drugs.
- C. Illegal drug use by teen-agers is highest in those areas of the country where teen-agers are least likely to stay in high school for their senior year.
- D. Survey participants are more likely now than they were three years ago to describe as "heroic" people who were addicted to illegal drugs and have been able to quit.
- E. The proportion of high school seniors who say that they strongly disapprove of illegal drug use has declined over the last three years.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 501

An annually conducted, nationwide survey shows a continuing marked decline in the use of illegal drugs by high school seniors over the last three years. Which of the following, if true, would provide most support for concluding from the survey results described above that the use of illegal drugs by people below the age of 20 is declining?

- A. Changes in the level of drug use by high school seniors are seldom matched by changes in the level of drug use by other people below the age of 20.

- B. In the past, high school seniors were consistently the population group most likely to use illegal drugs and most likely to use them heavily.
- C. The percentage of high school seniors who use illegal drugs is consistently very similar to the percentage of all people below the age of 20 who use illegal drugs.
- D. The decline revealed by the surveys is the result of drug education programs specifically targeted at those below the age of 20.
- E. The number of those surveyed who admit to having sold illegal drugs has declined even faster than has the number who have used drugs.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 502

President of the United States: I have received over 2,000 letters on this issue, and the vast majority of them support my current position. These letters prove that most of the people in the country agree with me.

Which of the following, if true, most weakens the President's conclusion?

- A. The issue is a very divisive one on which many people have strong opinions.
- B. Some members of Congress disagree with the President's position.
- C. People who disagree with the President feel more strongly about the issue than do people who agree with him.
- D. People who agree with the President are more likely to write to him than are people who disagree with him.
- E. During the presidential campaign, the President stated a position on this issue that was somewhat different from his current position.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 503

Some governments have tried to make alcohol and tobacco less attractive to consumers by regulating what can be shown in advertisements for these products, rather than by banning advertising of them altogether. However, the need to obey the letter of these restrictions has actually stimulated advertisers to create advertisements that are more inventive and humorous than they were prior to the restrictions' introduction.

which of the following, if true, would, in conjunction with the statements above, best support the conclusion that the government policy described above fails to achieve its objective?

- A. Because of the revenues gained from the sale of alcohol and tobacco, governments have no real interest in making these products less attractive to consumers.

- B. Advertisers tend to create inventive and humorous advertisements only if they have some particular reason to do so.
- C. Banning advertising of alcohol and tobacco is a particularly effective way of making these products less attractive to consumers.
- D. With the policy in place, advertisements for alcohol and tobacco have become far more inventive and humorous than advertisements for other kinds of products.
- E. The more inventive an advertisement is, the more attractive it makes the advertised product appear.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 504

Which of the following, if true, best completes the argument below? Comparisons of the average standards of living of the citizens of two countries should reflect the citizens' comparative access to goods and services. Reliable figures in a country's own currency for the average income of its citizens are easily obtained. But it is difficult to get an accurate comparison of average standards of living from these figures, because_____

- A. there are usually no figures comparing how much of two different currencies must be spent in order to purchase a given quantity of goods and services
- B. wage levels for the same job vary greatly from country to country, depending on cultural as well as on purely economic factors
- C. these figures must be calculated by dividing the gross national product of a country by the size of its population
- D. comparative access to goods and services is only one of several factors relevant in determining quality of life
- E. the wealth, and hence the standard of living, of a country's citizens is very closely related to their income

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 505

The level of lead contamination in United States rivers declined between 1975 and 1985. Federal regulations requiring a drop in industrial discharges of lead went into effect in 1975, but the major cause of the decline was a 75 percent drop in the use of leaded gasoline between 1975 and 1985. Which of the following, if true, best supports the claim that the major cause of the decline in the level of lead contamination in United States rivers was the decline in the use of leaded gasoline?

- A. The level of lead contamination in United States rivers fell sharply in both 1975 and 1983.
- B. Most of the decline in industrial discharges of lead occurred before 1976, but the largest decline in the level of river contamination occurred between

1980 and 1985.

- C. Levels of lead contamination in rivers fell sharply in 1975-1976 and rose very slightly over the next nine years.
- D. Levels of lead contamination rose in those rivers where there was reduced river flow due to drought.
- E. Although the use of leaded gasoline declined 75 percent between 1975 and 1985, 80 percent of the decline took place in 1985.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 506

George Bernard Shaw wrote: "That any sane nation, having observed that you could provide for the supply of bread by giving bakers a pecuniary interest in baking for you, should go on to give a surgeon a pecuniary interest in cutting off your leg is enough to make one despair of political humanity." Shaw's statement would best serve as an illustration in an argument criticizing which of the following?

- A. Dentists who perform unnecessary dental work in order to earn a profit
- B. Doctors who increase their profits by specializing only in diseases that affect a large percentage of the population
- C. Grocers who raise the price of food in order to increase their profit margins
- D. Oil companies that decrease the price of their oil in order to increase their market share
- E. Bakers and surgeons who earn a profit by supplying other peoples' basic needs

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 507

Since 1975 there has been in the United States a dramatic decline in the incidence of traditional childhood diseases such as measles. This decline has been accompanied by an increased incidence of Peterson's disease, a hitherto rare viral infection, among children. Few adults, however, have been affected by the disease.

Which of the following, if true, would best help to explain the increased incidence of Peterson's disease among children?

- A. Hereditary factors determine in part the degree to which a person is susceptible to the virus that causes Peterson's disease.
- B. The decrease in traditional childhood diseases and the accompanying increase in Peterson's disease have not been found in any other country.
- C. Children who contract measles develop an immunity to the virus that causes Peterson's disease.
- D. Persons who did not contract measles in childhood might contract measles in adulthood, in which case the consequences of the disease would

generally be more severe.

E. Those who have contracted Peterson's disease are at increased risk of contracting chicken pox.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 508

Many plant varieties used in industrially developed nations to improve cultivated crops come from less developed nations. No compensation is paid on the grounds that the plants used are "the common heritage of humanity." Such reasoning is, however, flawed. After all, no one suggests that coal, oil, and ores should be extracted without payment.

Which of the following best describes an aspect of the method used by the author in the argument above?

- A. The author proceeds from a number of specific observations to a tentative generalization.
- B. The author applies to the case under discussion facts about phenomena assumed to be similar in some relevant respect.
- C. A position is strengthened by showing that the opposite of that position would have logically absurd consequences.
- D. A line of reasoning is called into question on the grounds that it confuses cause and effect in a causal relation.
- E. An argument is analyzed by separating statements of fact from individual value judgments.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 509

It is widely assumed that a museum is helped financially when a generous patron donates a potential exhibit. In truth, however, donated objects require storage space, which is not free, and routine conservation, which is rather expensive. Therefore, such gifts exacerbate rather than lighten the demands made on a museum's financial resources.

Which of the following, if true, most seriously weakens the argument above?

- A. To keep patrons well disposed, a museum will find it advisable to put at least some donated objects on exhibit rather than merely in storage.
- B. The people who are most likely to donate valuable objects to a museum are also the people who are most likely to make cash gifts to it.
- C. A museum cannot save money by resorting to cheap storage under less than adequate conditions, because so doing would drive up the cost of conservation.
- D. Patrons expect a museum to keep donated objects in its possession rather than to raise cash by selling them.

- E. Objects donated by a patron to a museum are often of such importance that the museum would be obliged to add them to its collection through purchase if necessary.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 510

Despite the approach of winter, oil prices to industrial customers are exceptionally low this year and likely to remain so. Therefore, unless the winter is especially severe, the price of natural gas to industrial customers is also likely to remain low.

Which of the following, if true, provides the most support for the conclusion above?

- A. Long-term weather forecasts predict a mild winter.
- B. The industrial users who consume most natural gas can quickly and cheaply switch to using oil instead.
- C. The largest sources of supply for both oil and natural gas are in subtropical regions unlikely to be affected by winter weather.
- D. The fuel requirements of industrial users of natural gas are not seriously affected by the weather.
- E. Oil distribution is more likely to be affected by severe winter weather than is the distribution of natural gas.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 511

The country of Maravia has severe air pollution, 80 percent of which is caused by the exhaust fumes of cars. In order to reduce the number of cars on the road, the government is raising taxes on the cost of buying and running a car by 20 percent. This tax increase, therefore, will significantly reduce air pollution in Maravia.

Which of the following, if true, most seriously weakens the argument above?

- A. The government of Maravia is in the process of building a significant number of roadways.
- B. Maravia is an oil-producing country and is able to refine an amount of gasoline sufficient for the needs of its population.
- C. Maravia has had an excellent public transportation system for many years.
- D. Ninety percent of the population of Maravia is very prosperous and has a substantial amount of disposable income.
- E. In Maravia, cars that emit relatively low levels of pollutants cost 10 percent less to operate, on average, than do cars that emit high levels of pollutants.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 512

Consumer income reports produced by the government distinguish between households and families by means of the following definition: "A family is a household containing a householder and at least one person related to the householder." Except for the homeless and people in group living quarters, most people live in households.

According to the definition above, which of the following must be true?

- A. All householders are members of families.
- B. All families include a householder.
- C. All of the people related to a householder form a family.
- D. Some people residing in group living quarters are members of families.
- E. Some homeless people reside in group living quarters.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 513

The proportion of manufacturing companies in Alameda that use microelectronics in their manufacturing processes increased from 6 percent in 1979 to 66 percent in 1990. Many labor leaders say that the introduction of microelectronics is the principal cause of the great increase in unemployment during that period in Alameda. In actual fact, however, most of the job losses were due to organizational changes. Moreover, according to new figures released by the labor department, there were many more people employed in Alameda in the manufacturing industry in 1990 than in 1979. Which of the following, if true, best reconciles the discrepancy between the increase in unemployment and the increase in jobs in the manufacturing industry of Alameda?

- A. Many products that contain microelectronic components are now assembled completely by machine.
- B. Workers involved in the various aspects of the manufacturing processes that use microelectronic technology need extensive training.
- C. It is difficult to evaluate numerically what impact on job security the introduction of microelectronics in the workplace had before 1979.
- D. In 1990 over 90 percent of the jobs in Alameda's manufacturing companies were filled by workers who moved to Alameda because they had skills for which there was no demand in Alameda prior to the introduction of microelectronics there.
- E. Many workers who have retired from the manufacturing industry in Alameda since 1979 have not been replaced by younger workers.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 514

The proportion of manufacturing companies in Alameda that use microelectronics in their manufacturing processes increased from 6 percent in 1979 to 66 percent in 1990. Many labor leaders say that the introduction of microelectronics is the principal cause of the great increase in unemployment during that period in Alameda. In actual fact, however, most of the job losses were due to organizational changes. Moreover, according to new figures released by the labor department, there were many more people employed in Alameda in the manufacturing industry in 1990 than in 1979. Which of the following, if true, would most strengthen the labor leaders' claim concerning the manufacturing industry in Alameda?

- A. From 1979 to 1990, fewer employees of manufacturing companies in Alameda lost their jobs because of the introduction of microelectronics than did employees of manufacturing companies in the nearby community of Rockside.
- B. The figures on the use of microelectronics that were made public are the result of inquiries made of managers in the manufacturing industry in Alameda.
- C. The organizational changes that led to job losses in all sectors of the manufacturing industry in Alameda were primarily the result of the introduction of microelectronics.
- D. Figures on job losses in the manufacturing industry in Alameda for the late sixties and early seventies have not been made available.
- E. A few jobs in the manufacturing industry in Alameda could have been saved if workers had been willing to become knowledgeable in microelectronics.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 515

The number of musicians employed to play accompaniment for radio and television commercials has sharply decreased over the past ten years. This has occurred even though the number of commercials produced each year has not significantly changed for the last ten years. Which of the following, if it occurred during the past ten years, would contribute LEAST to an explanation of the facts above?

- A. The type of music most popular for use in commercials has changed from a type that requires a large number of instruments to a type that requires very few instruments.
- B. There has been an increase in the number of commercials that use only the spoken word and sound effects, rather than musical accompaniment.
- C. There has been an increase in the number of commercials that use a synthesizer, an instrument on which one musician can reproduce the sound of many musicians playing together.

- D. There has been an increase in the number of commercials that use prerecorded music as their only source of music.
- E. There has been an increase in the number of commercials that use musicians just starting in the music industry rather than musicians experienced in accompanying commercials.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 516

Recent audits revealed that BanqueCard, a credit service, has erred in calculating the interest it charges its clients. But BanqueCard's chief accountant reasoned that the profits that the company shows would remain unaffected by a revision of its clients' credit statements to correct its previous billing errors, since just as many clients had been overcharged as undercharged. Which of the following is a reasoning error that the accountant makes in concluding that correcting its clients' statements would leave BanqueCard's profits unaffected?

- A. Relying on the reputation of BanqueCard as a trustworthy credit service to maintain the company's clientele after the error becomes widely known
- B. Failing to establish that BanqueCard charges the same rates of interest for all of its clients
- C. Overlooking the possibility that the amount by which BanqueCard's clients had been overcharged might be greater than the amount by which they had been undercharged
- D. Assuming that the clients who had been overcharged by BanqueCard had not noticed the error in their credit bills
- E. Presupposing that each one of BanqueCard's clients had either been overcharged or else had been undercharged by the billing error

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 517

Residents of an apartment complex are considering two possible plans for collecting recyclable trash. Plan 1 - Residents will deposit recyclable trash in municipal dumpsters located in the parking lot. The trash will be collected on the first and the fifteenth days of each month. Plan 2 - Residents will be given individual containers for recyclable trash. The containers will be placed at the curb twice a week for trash collection. Which of the following points raised at a meeting of the residents, if valid, would most favor one of the recycling plans over the other?

- A. Residents will be required to exercise care in separating recyclable trash from non-recyclable trash.
- B. For trash recycling to be successful, residents must separate recyclable bottles and cans from recyclable paper products.
- C. Penalties will be levied against residents who fail to sort their trash correctly.

- D. Individual recycling containers will need to be made of a strong and durable material.
- E. Recyclable trash that is allowed to accumulate for two weeks will attract rodents.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 518

In 1990 all of the people who applied for a job at Evco also applied for a job at Radeco, and Evco and Radeco each offered jobs to half of these applicants. Therefore, every one of these applicants must have been offered a job in 1990.

The argument above is based on which of the following assumptions about these job applicants?

- A. All of the applicants were very well qualified for a job at either Evco or Radeco.
- B. All of the applicants accepted a job at either Evco or Radeco.
- C. None of the applicants was offered a job by both Evco and Radeco.
- D. None of the applicants had applied for jobs at places other than Evco and Radeco.
- E. None of the applicants had previously worked for either Evco or Radeco.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 519

The geese that gather at the pond of a large corporation create a hazard for executives who use the corporate helicopter, whose landing site is 40 feet away from the pond. To solve the problem, the corporation plans to import a large number of herding dogs to keep the geese away from the helicopter. Which of the following, if a realistic possibility, would cast the most serious doubt on the prospects for success of the corporation's plan?

- A. The dogs will form an uncontrollable pack.
- B. The dogs will require training to learn to herd the geese.
- C. The dogs will frighten away foxes that prey on old and sick geese.
- D. It will be necessary to keep the dogs in quarantine for 30 days after importing them.
- E. Some of the geese will move to the pond of another corporation in order to avoid being herded by the dogs.

Correct Answer: C

Section: Critical Reasoning Questions**Explanation****Explanation/Reference:****QUESTION 520**

When a person is under intense psychological stress, his or her cardiovascular response is the same as it is during vigorous physical exercise. Psychological stress, then, must be beneficial for the heart as is vigorous physical exercise. The argument above relies on which of the following assumptions?

- A. Exercise is an effective means of relieving psychological stress.
- B. The body's short-term cardiovascular response to any activity indicates that activity's long-term effect on the body.
- C. Cardiovascular response during an activity is an adequate measure of how beneficial the activity is for the heart.
- D. Psychological stress can have a positive effect on the body.
- E. Vigorous exercise is the most reliable method of maintaining a healthy heart.

Correct Answer: C

Section: Critical Reasoning Questions**Explanation****Explanation/Reference:****QUESTION 521**

After graduating from high school, people rarely multiply fractions or discuss ancient Rome, but they are confronted daily with decisions relating to home economics. Yet whereas mathematics and history are required courses in the high school curriculum, home economics is only an elective, and few students choose to take it. Which of the following positions would be best supported by the considerations above?

- A. If mathematics and history were not required courses, few students would choose to take them.
- B. Whereas home economics would be the most useful subject for people facing the decisions they must make in daily life, often mathematics and history can also help them face these decisions.
- C. If it is important to teach high school students subjects that relate to decisions that will confront them in their daily lives, then home economics should be made an important part of the high school curriculum.
- D. Mathematics, history, and other courses that are not directly relevant to a person's daily life should not be a required part of the high school curriculum.
- E. Unless high schools put more emphasis on nonacademic subjects like home economics, people graduating from high school will never feel comfortable about making the decisions that will confront them in their daily lives.

Correct Answer: E

Section: Critical Reasoning Questions**Explanation****Explanation/Reference:****QUESTION 522**

Houses built during the last ten years have been found to contain indoor air pollution at levels that are, on average, much higher than the levels found in older houses. The reason air-pollution levels are higher in the newer houses is that many such houses are built near the sites of old waste dumps or where automobile emissions are heavy.

Which of the following, if true, calls into question the explanation above?

- A. Many new houses are built with air-filtration systems that remove from the house pollutants that are generated indoors.
- B. The easing of standards for smokestack emissions has led to an increase in air-pollution levels in homes.
- C. New houses built in secluded rural areas are relatively free of air pollutants.
- D. Warm-weather conditions tend to slow down the movement of air, thus keeping pollution trapped near its source.
- E. Pressboard, an inexpensive new plywood substitute now often used in the construction of houses, emits the pollutant formaldehyde into the house.

Correct Answer: C

Section: Critical Reasoning Questions**Explanation****Explanation/Reference:****QUESTION 523**

The most important aspect of moviemaking is conveying a scene's rhythm. Conveying rhythm depends less on the artistic quality of the individual photographic images than on how the shots go together and the order in which they highlight different aspects of the action taking place in front of the camera. If the statements above are true, which of the following must be true on the basis of them?

- A. The artistic quality of the individual photographic image is unimportant in movie photography.
- B. Photographers known for the superb artistic quality of their photographs are seldom effective as moviemakers.
- C. Having the ability to produce photographs of superb artistic quality does not in itself guarantee having the ability to be a good moviemaker.
- D. Movie photographers who are good at their jobs rarely give serious thought to the artistic quality of the photographs they take.
- E. To convey a scene's rhythm effectively, a moviemaker must highlight many different aspects of the action taking place.

Correct Answer: A

Section: Critical Reasoning Questions**Explanation****Explanation/Reference:**

QUESTION 524

Human beings can see the spatial relations among objects by processing information conveyed by light. Scientists trying to build computers that can detect spatial relations by the same kind of process have so far designed and built stationary machines. However, these scientists will not achieve their goal until they produce such a machine that can move around in its environment. Which of the following, if true, would best support the prediction above?

- A. Human beings are dependent on visual cues from motion in order to detect spatial relations.
- B. Human beings can often easily detect the spatial relations among objects, even when those objects are in motion.
- C. Detecting spatial relations among objects requires drawing inferences from the information conveyed by light.
- D. Although human beings can discern spatial relations through their sense of hearing, vision is usually the most important means of detecting spatial relations.
- E. Information about the spatial relations among objects can be obtained by noticing such things as shadows and the relative sizes of objects.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Answer is Modified.

QUESTION 525

In a study of the effect of color on productivity, 50 of 100 factory workers were moved from their drab workroom to a brightly colored workroom. Both these workers and the 50 who remained in the drab workroom increased their productivity, probably as a result of the interest taken by researchers in the work of both groups during the study.

Which of the following, if true, would cast most doubt upon the author's interpretation of the study results given above?

- A. The 50 workers moved to the brightly colored room performed precisely the same manufacturing task as the workers who remained in the drab workroom.
- B. The drab workroom was designed to provide adequate space for at most 65 workers.
- C. The 50 workers who moved to the brightly colored workroom were matched as closely as possible in age and level of training to the 50 workers who remained in the drab work-room.
- D. Nearly all the workers in both groups had volunteered to move to the brightly colored workroom.
- E. Many of the workers who moved to the brightly colored workroom reported that they liked the drab workroom as well as or better than they liked the brightly colored workroom.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 526

ESTION NO: 466

Manager: Accounting and Billing are located right next to each other and the two departments do similar kinds of work; yet expenditures for clerical supplies charged to Billing are much higher. Is Billing wasting supplies?

Head of Billing: Not at all.

Which of the following, if true, best supports the position of the Head of Billing?

- A. There are more staff members in Accounting than in Billing.
- B. Two years ago, expenditures in Accounting for clerical supplies were the same as were expenditures that year in Billing for clerical supplies.
- C. The work of Billing now requires a wider variety of clerical supplies than it did in the past.
- D. Some of the paper-and-pencil work of both Accounting and Billing has been replaced by work done on computers.
- E. Members of Accounting found the clerical supplies cabinet of Billing more convenient to go to for supplies than their own department's cabinet.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 527

Cable-television spokesperson: Subscriptions to cable television are a bargain in comparison to "free" television. Remember that "free" television is not really free. It is consumers, in the end, who pay for the costly advertising that supports "free" television.

Which of the following, if true, is most damaging to the position of the cable-television spokesperson?

- A. Consumers who do not own television sets are less likely to be influenced in their purchasing decisions by television advertising than are consumers who own television sets.
- B. Subscriptions to cable television include access to some public-television channels, which do not accept advertising.
- C. For locations with poor television reception, cable television provides picture quality superior to that provided by free television.
- D. There is as much advertising on many cable-television channels as there is on "free" television channels.
- E. Cable-television subscribers can choose which channels they wish to receive, and the fees vary accordingly.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 528

Wood smoke contains dangerous toxins that cause changes in human cells. Because wood smoke presents such a high health risk, legislation is needed to regulate the use of open-air fires and wood-burning stoves.

Which of the following, if true, provides the most support for the argument above?

- A. The amount of dangerous toxins contained in wood smoke is much less than the amount contained in an equal volume of automobile exhaust.
- B. Within the jurisdiction covered by the proposed legislation, most heating and cooking is done with oil or natural gas.
- C. Smoke produced by coal-burning stoves is significantly more toxic than smoke from wood-burning stoves.
- D. No significant beneficial effect on air quality would result if open-air fires were banned within the jurisdiction covered by the proposed legislation.
- E. In valleys where wood is used as the primary heating fuel, the concentration of smoke results in poor air quality.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 529

Within 20 years it will probably be possible to identify the genetic susceptibility an individual may have toward any particular disease. Eventually, effective strategies will be discovered to counteract each such susceptibility. Once these effective strategies are found, therefore, the people who follow them will never get sick.

The argument above is based on which of the following assumptions?

- A. For every disease there is only one strategy that can prevent its occurrence.
- B. In the future, genetics will be the only medical specialty of any importance.
- C. All human sicknesses are in part the result of individuals' genetic susceptibilities.
- D. All humans are genetically susceptible to some diseases.
- E. People will follow medical advice when they are convinced that it is effective.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 530

Most employees in the computer industry move from company to company, changing jobs several times in their careers. However, Summit Computers is known throughout the industry for retaining its employees. Summit credits its success in retaining employees to its informal, nonhierarchical work

environment.

Which of the following, if true, most strongly supports Summit's explanation of its success in retaining employees?

- A. Some people employed in the computer industry change jobs if they become bored with their current projects.
- B. A hierarchical work environment hinders the cooperative exchange of ideas that computer industry employees consider necessary for their work.
- C. Many of Summit's senior employees had previously worked at only one other computer company.
- D. In a nonhierarchical work environment, people avoid behavior that might threaten group harmony and thus avoid discussing with their colleagues any dissatisfaction they might have with their jobs.
- E. The cost of living near Summit is relatively low compared to areas in which some other computer companies are located.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 531

Financing for a large construction project was provided by a group of banks. When the money was gone before the project was completed, the banks approved additional loans. Now, with funds used up again and completion still not at hand, the banks refuse to extend further loans, although without those loans, the project is doomed.

Which of the following, if true, best explains why the bank's current reaction is different from their reaction in the previous instance of depletion of funds?

- A. The banks have reassessed the income potential of the completed project and have concluded that total income generable would be less than total interest due on the old plus the needed new loans.
- B. The banks have identified several other projects that offer faster repayment of the principal if loans are approved now to get those projects started.
- C. The banks had agreed with the borrowers that the construction loans would be secured by the completed project.
- D. The cost overruns were largely due to unforeseeable problems that arose in the most difficult phase of the construction work.
- E. The project stimulated the development and refinement of several new construction techniques, which will make it easier and cheaper to carry out similar projects in the future.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 532

Low-income families are often unable to afford as much child care as they need. One government program would award low-income families a refund on the income taxes they pay of as much as \$1,000 for each child under age four. This program would make it possible for all low-income families with

children under age four to obtain more child care than they otherwise would have been able to afford. Which of the following, if true, most seriously calls into question the claim that the program would make it possible for all low-income families to obtain more child care?

- A. The average family with children under age four spends more than \$1,000 a year on child care.
- B. Some low-income families in which one of the parents is usually available to care for children under age four may not want to spend their income tax refund on child care.
- C. The reduction in government revenues stemming from the income tax refund will necessitate cuts in other government programs, such as grants for higher education.
- D. Many low-income families with children under age four do not pay any income taxes because their total income is too low to be subject to such taxes.
- E. Income taxes have increased substantially over the past twenty years, reducing the money that low-income families have available to spend on child care.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 533

Although parapsychology is often considered a pseudoscience, it is in fact a genuine scientific enterprise, for it uses scientific methods such as controlled experiments and statistical tests of clearly stated hypotheses to examine the questions it raises.

The conclusion above is properly drawn if which of the following is assumed?

- A. If a field of study can conclusively answer the questions it raises, then it is a genuine science.
- B. Since parapsychology uses scientific methods, it will produce credible results.
- C. Any enterprise that does not use controlled experiments and statistical tests is not genuine science.
- D. Any field of study that employs scientific methods is a genuine scientific enterprise.
- E. Since parapsychology raises clearly statable questions, they can be tested in controlled experiments.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 534

Hotco oil burners, designed to be used in asphalt plants, are so efficient that Hotco will sell one to the Clifton Asphalt plant for no payment other than the cost savings between the total amount the asphalt plant actually paid for oil using its former burner during the last two years and the total amount it will pay for oil using the Hotco burner during the next two years. On installation, the plant will make an estimated payment, which will be adjusted after two

years to equal the actual cost savings. Which of the following, if it occurred, would constitute a disadvantage for Hotco of the plan described above?

- A. Another manufacturer's introduction to the market of a similarly efficient burner
- B. The Clifton Asphalt plant's need for more than one new burner
- C. Very poor efficiency in the Clifton Asphalt plant's old burner
- D. A decrease in the demand for asphalt
- E. A steady increase in the price of oil beginning soon after the new burner is installed

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 535

Today's low gasoline prices make consumers willing to indulge their preference for larger cars, which consume greater amounts of gasoline as fuel. So United States automakers are unwilling to pursue the development of new fuel-efficient technologies aggressively. The particular reluctance of the United States automobile industry to do so, however, could threaten the industry's future. Which of the following, if true, would provide the most support for the claim above about the future of the United States automobile industry?

- A. A prototype fuel-efficient vehicle, built five years ago, achieves a very high 81 miles per gallon on the highway and 63 in the city, but its materials are relatively costly.
- B. Small cars sold by manufacturers in the United States are more fuel efficient now than before the sudden jump in oil prices in 1973.
- C. Automakers elsewhere in the world have slowed the introduction of fuel-efficient technologies but have pressed ahead with research and development of them in preparation for a predicted rise in world oil prices.
- D. There are many technological opportunities for reducing the waste of energy in cars and light trucks through weight, aerodynamic drag, and braking friction.
- E. The promotion of mass transit over automobiles as an alternative mode of transportation has encountered consumer resistance that is due in part to the failure of mass transit to accommodate the wide dispersal of points of origin and destinations for trips.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 536

An experiment was done in which human subjects recognize a pattern within a matrix of abstract designs and then select another design that completes that pattern. The results of the experiment were surprising. The lowest expenditure of energy in neurons in the brain was found in those subjects who

performed most successfully in the experiments.

Which of the following hypotheses best accounts for the findings of the experiment?

- A. The neurons of the brain react less when a subject is trying to recognize patterns than when the subject is doing other kinds of reasoning.
- B. Those who performed best in the experiment experienced more satisfaction when working with abstract patterns than did those who performed less well.
- C. People who are better at abstract pattern recognition have more energy-efficient neural connections.
- D. The energy expenditure of the subjects brains increases when a design that completes the initially recognized pattern is determined.
- E. The task of completing a given design is more capably performed by athletes, whose energy expenditure is lower when they are at rest than is that of the general population.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 537

A researcher studying drug addicts found that, on average, they tend to manipulate other people a great deal more than nonaddicts do. The researcher concluded that people who frequently manipulate other people are likely to become addicts.

Which of the following, if true, most seriously weakens the researcher's conclusion?

- A. After becoming addicted to drugs, drug addicts learn to manipulate other people as a way of obtaining drugs.
- B. When they are imprisoned, drug addicts often use their ability to manipulate other people to obtain better living conditions.
- C. Some nonaddicts manipulate other people more than some addicts do.
- D. People who are likely to become addicts exhibit unusual behavior patterns other than frequent manipulation of other people.
- E. The addicts that the researcher studied were often unsuccessful in obtaining what they wanted when they manipulated other people.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 538

One way to judge the performance of a company is to compare it with other companies. This technique, commonly called "benchmarking," permits the manager of a company to discover better industrial practices and can provide a justification for the adoption of good practices. Any of the following, if true, is a valid reason for benchmarking the performance of a company against companies with which it is not in competition rather than against competitors EXCEPT:

- A. Comparisons with competitors are most likely to focus on practices that the manager making the comparisons already employs.
- B. Getting "inside" information about the unique practices of competitors is particularly difficult.
- C. Since companies that compete with each other are likely to have comparable levels of efficiency, only benchmarking against non competitors is likely to reveal practices that would aid in beating competitors.
- D. Managers are generally more receptive to new ideas that they find outside their own industry.
- E. Much of the success of good companies is due to their adoption of practices that take advantage of the special circumstances of their products or markets.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 539

Among the more effective kinds of publicity that publishers can get for a new book is to have excerpts of it published in a high-circulation magazine soon before the book is published. The benefits of such excerpting include not only a sure increase in sales but also a fee paid by the magazine to the book's publisher.

Which of the following conclusions is best supported by the information above?

- A. The number of people for whom seeing an excerpt of a book in a magazine provides an adequate substitute for reading the whole book is smaller than the number for whom the excerpt stimulates a desire to read the book.
- B. Because the financial advantage of excerpting a new book in a magazine usually accrues to the book's publisher, magazine editors are unwilling to publish excerpts from new books.
- C. In calculating the total number of copies that a book has sold, publishers include sales of copies of magazines that featured an excerpt of the book.
- D. The effectiveness of having excerpts of a book published in a magazine, measured in terms of increased sales of a book, is proportional to the circulation of the magazine in which the excerpts are published.
- E. Books that are suitable for excerpting in high-circulation magazines sell more copies than books that are not suitable for excerpting.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 540

In Spartans territory, archaeologists discovered charred bone fragments dating back 1 million years. Analysis of the fragments, which came from a variety of animals, showed that they had been heated to temperatures no higher than those produced in experimental campfires made from branches of

white stinkwood, the most common tree around Spartans.

Which of the following, if true, would, together with the information above, provide the best basis for the claim that the charred bone fragments are evidence of the use of fire by early hominids?

- A. The white stinkwood tree is used for building material by the present-day inhabitants of Swartkans.
- B. Forest fires can heat wood to a range of temperatures that occur in campfires.
- C. The bone fragments were fitted together by the archaeologists to form the complete skeletons of several animals.
- D. Apart from the Swartkans discovery, there is reliable evidence that early hominids used fire as many as 500 thousand years ago.
- E. The bone fragments were found in several distinct layers of limestone that contained primitive cutting tools known to have been used by early hominids.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 541

The local board of education found that, because the current physics curriculum has little direct relevance to today's world, physics classes attracted few high school students. So to attract students to physics classes, the board proposed a curriculum that emphasizes principles of physics involved in producing and analyzing visual images.

Which of the following, if true, provides the strongest reason to expect that the proposed curriculum will be successful in attracting students?

- A. Several of the fundamental principles of physics are involved in producing and analyzing visual images.
- B. Knowledge of physics is becoming increasingly important in understanding the technology used in today's world.
- C. Equipment that a large producer of photographic equipment has donated to the high school could be used in the proposed curriculum.
- D. The number of students interested in physics today is much lower than the number of students interested in physics 50 years ago.
- E. In today's world the production and analysis of visual images is of major importance in communications, business, and recreation.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 542

Many companies now have employee assistance programs that enable employees, free of charge, to improve their physical fitness, reduce stress, and learn ways to stop smoking. These programs increase worker productivity, reduce absenteeism, and lessen insurance costs for employee health care. Therefore, these programs benefit the company as well as the employee. Which of the following, if true, most significantly strengthens the conclusion

above?

- A. Physical fitness programs are often the most popular services offered to employees.
- B. Studies have shown that training in stress management is not effective for many people.
- C. Regular exercise reduces people's risk of heart disease and provides them with increased energy.
- D. Physical injuries sometimes result from entering a strenuous physical fitness program too quickly.
- E. Employee assistance programs require companies to hire people to supervise the various programs offered.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 543

Unlike the wholesale price of raw wool, the wholesale price of raw cotton has fallen considerably in the last year. Thus, although the retail price of cotton clothing at retail clothing stores has not yet fallen, it will inevitably fall.

Which of the following, if true, most seriously weakens the argument above?

- A. The cost of processing raw cotton for cloth has increased during the last year.
- B. The wholesale price of raw wool is typically higher than that of the same volume of raw cotton.
- C. The operating costs of the average retail clothing store have remained constant during the last year.
- D. Changes in retail prices always lag behind changes in wholesale prices.
- E. The cost of harvesting raw cotton has increased in the last year.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 544

Small-business groups are lobbying to defeat proposed federal legislation that would substantially raise the federal minimum wage. This opposition is surprising since the legislation they oppose would, for the first time, exempt all small businesses from paying any minimum wage. Which of the following, if true, would best explain the opposition of small-business groups to the proposed legislation?

- A. Under the current federal minimum-wage law, most small businesses are required to pay no less than the minimum wage to their employees.
- B. In order to attract workers, small companies must match the wages offered by their larger competitors, and these competitors would not be exempt

under the proposed laws.

- C. The exact number of companies that are currently required to pay no less than the minimum wage but that would be exempt under the proposed laws is unknown.
- D. Some states have set their own minimum wages--in some cases, quite a bit above the level of the minimum wage mandated by current federal law--for certain key industries.
- E. Service companies make up the majority of small businesses and they generally employ more employees per dollar of revenues than do retail or manufacturing businesses.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 545

Reviewer: The book *Art's Decline* argues that European painters today lack skills that were common among European painters of preceding centuries. In this the book must be right, since its analysis of 100 paintings, 50 old and 50 contemporary, demonstrates convincingly that none of the contemporary paintings are executed as skillfully as the older paintings. Which of the following points to the most serious logical flaw in the reviewer's argument?

- A. The paintings chosen by the book's author for analysis could be those that most support the book's thesis.
- B. There could be criteria other than the technical skill of the artist by which to evaluate a painting.
- C. The title of the book could cause readers to accept the book's thesis even before they read the analysis of the paintings that supports it.
- D. The particular methods currently used by European painters could require less artistic skill than do methods used by painters in other parts of the world.
- E. A reader who was not familiar with the language of art criticism might not be convinced by the book's analysis of the 100 paintings.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 546

The pharmaceutical industry argues that because new drugs will not be developed unless heavy development costs can be recouped in later sales, the current 20 years of protection provided by patents should be extended in the case of newly developed drugs. However, in other industries new-product development continues despite high development costs, a fact that indicates that the extension is unnecessary. Which of the following, if true, most strongly supports the pharmaceutical industry's argument against the challenge made above?

- A. No industries other than the pharmaceutical industry have asked for an extension of the 20-year limit on patent protection.

- B. Clinical trials of new drugs, which occur after the patent is granted and before the new drug can be marketed, often now take as long as 10 years to complete.
- C. There are several industries in which the ratio of research and development costs to revenues is higher than it is in the pharmaceutical industry.
- D. An existing patent for a drug does not legally prevent pharmaceutical companies from bringing to market alternative drugs, provided they are sufficiently dissimilar to the patented drug.
- E. Much recent industrial innovation has occurred in products--for example, in the computer and electronics industries--for which patent protection is often very ineffective.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 547

Bank depositors in the United States are all financially protected against bank failure because the government insures all individuals' bank deposits. An economist argues that this insurance is partly responsible for the high rate of bank failures, since it removes from depositors any financial incentive to find out whether the bank that holds their money is secure against failure. If depositors were more selective, then banks would need to be secure in order to compete for depositors' money. The economist's argument makes which of the following assumptions?

- A. Bank failures are caused when big borrowers default on loan repayments.
- B. A significant proportion of depositors maintain accounts at several different banks.
- C. The more a depositor has to deposit, the more careful he or she tends to be in selecting a bank.
- D. The difference in the interest rates paid to depositors by different banks is not a significant factor in bank failures.
- E. Potential depositors are able to determine which banks are secure against failure.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 548

Bank depositors in the United States are all financially protected against bank failure because the government insures all individuals' bank deposits. An economist argues that this insurance is partly responsible for the high rate of bank failures, since it removes from depositors any financial incentive to find out whether the bank that holds their money is secure against failure. If depositors were more selective, then banks would need to be secure in order to compete for depositors' money. Which of the following, if true, most seriously weakens the economist's argument?

- A. Before the government started to insure depositors against bank failure, there was a lower rate of bank failure than there is now.

- B. When the government did not insure deposits, frequent bank failures occurred as a result of depositors' fears of losing money in bank failures.
- C. Surveys show that a significant proportion of depositors are aware that their deposits are insured by the government.
- D. There is an upper limit on the amount of an individual's deposit that the government will insure, but very few individuals' deposits exceed this limit.
- E. The security of a bank against failure depends on the percentage of its assets that are loaned out and also on how much risk its loans involve.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 549

Passengers must exit airplanes swiftly after accidents, since gases released following accidents are toxic to humans and often explode soon after being released. In order to prevent passenger deaths from gas inhalation, safety officials recommend that passengers be provided with smoke hoods that prevent inhalation of the gases.

Which of the following, if true, constitutes the strongest reason not to require implementation of the safety officials' recommendation?

- A. Test evacuations showed that putting on the smoke hoods added considerably to the overall time it took passengers to leave the cabin.
- B. Some airlines are unwilling to buy the smoke hoods because they consider them to be prohibitively expensive.
- C. Although the smoke hoods protect passengers from the toxic gases, they can do nothing to prevent the gases from igniting.
- D. Some experienced flyers fail to pay attention to the safety instructions given on every commercial flight before takeoff.
- E. In many airplane accidents, passengers who were able to reach emergency exits were overcome by toxic gases before they could exit the airplane.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 550

In 1960, 10 percent of every dollar paid in automobile insurance premiums went to pay costs arising from injuries incurred in car accidents. In 1990, 50 percent of every dollar paid in automobile insurance premiums went toward such costs, despite the fact that cars were much safer in 1990 than in 1960. Which of the following, if true, best explains the discrepancy outlined above?

- A. There were fewer accidents in 1990 than in 1960.
- B. On average, people drove more slowly in 1990 than in 1960.
- C. Cars grew increasingly more expensive to repair over the period in question.
- D. The price of insurance increased more rapidly than the rate of inflation between 1960 and 1990.

E. Health-care costs rose sharply between 1960 and 1990.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 551

Caterpillars of all species produce an identical hormone called "juvenile hormone" that maintains feeding behavior. Only when a caterpillar has grown to the right size for pupation to take place does a special enzyme halt the production of juvenile hormone. This enzyme can be synthesized and will, on being ingested by immature caterpillars, kill them by stopping them from feeding. Which of the following, if true, most strongly supports the view that it would not be advisable to try to eradicate agricultural pests that go through a caterpillar stage by spraying croplands with the enzyme mentioned above?

- A. Most species of caterpillar are subject to some natural predation.
- B. Many agricultural pests do not go through a caterpillar stage.
- C. Many agriculturally beneficial insects go through a caterpillar stage.
- D. Since caterpillars of different species emerge at different times, several sprayings would be necessary.
- E. Although the enzyme has been synthesized in the laboratory, no large-scale production facilities exist as yet.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 552

Although aspirin has been proven to eliminate moderate fever associated with some illnesses, many doctors no longer routinely recommend its use for this purpose. A moderate fever stimulates the activity of the body's disease-fighting white blood cells and also inhibits the growth of many strains of disease-causing bacteria.

If the statements above are true, which of the following conclusions is most strongly supported by them?

- A. Aspirin, an effective painkiller, alleviates the pain and discomfort of many illnesses.
- B. Aspirin can prolong a patient's illness by eliminating moderate fever helpful in fighting some diseases.
- C. Aspirin inhibits the growth of white blood cells, which are necessary for fighting some illnesses.
- D. The more white blood cells a patient's body produces, the less severe the patient's illness will be.
- E. The focus of modern medicine is on inhibiting the growth of disease-causing bacteria within the body.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 553

Because postage rates are rising, Home Decorator magazine plans to maximize its profits by reducing by one half the number of issues it publishes each year. The quality of articles, the number of articles published per year, and the subscription price will not change. Market research shows that neither subscribers nor advertisers will be lost if the magazine's plan is instituted. Which of the following, if true, provides the strongest evidence that the magazine's profits are likely to decline if the plan is instituted?

- A. With the new postage rates, a typical issue under the proposed plan would cost about one-third more to mail than a typical current issue would.
- B. The majority of the magazine's subscribers are less concerned about a possible reduction in the quantity of the magazine's articles than about a possible loss of the current high quality of its articles.
- C. Many of the magazine's long-time subscribers would continue their subscriptions even if the subscription price were increased.
- D. Most of the advertisers that purchase advertising space in the magazine will continue to spend the same amount on advertising per issue as they have in the past.
- E. Production costs for the magazine are expected to remain stable.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 554

A study of marital relationships in which one partner's sleeping and waking cycles differ from those of the other partner reveals that such couples share fewer activities with each other and have more violent arguments than do couples in a relationship in which both partners follow the same sleeping and waking patterns. Thus, mismatched sleeping and waking cycles can seriously jeopardize a marriage. Which of the following, if true, most seriously weakens the argument above?

- A. Married couples in which both spouses follow the same sleeping and waking patterns also occasionally have arguments that can jeopardize the couple's marriage.
- B. The sleeping and waking cycles of individuals tend to vary from season to season.
- C. The individuals who have sleeping and waking cycles that differ significantly from those of their spouses tend to argue little with colleagues at work.
- D. People in unhappy marriages have been found to express hostility by adopting a different sleeping and waking cycle from that of their spouses.
- E. According to a recent study, most people's sleeping and waking cycles can be controlled and modified easily.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 555

Roland: The alarming fact is that 90 percent of the people in this country now report that they know someone who is unemployed.

Sharon: But a normal, moderate level of unemployment is 5 percent, with 1 out of 20 workers unemployed. So at any given time if a person knows approximately 50 workers, 1 or more will very likely be unemployed.

Sharon's argument is structured to lead to which of the following as a conclusion?

- A. The fact that 90% of the people know someone who is unemployed is not an indication that unemployment is abnormally high.
- B. The current level of unemployment is not moderate.
- C. If at least 5% of workers are unemployed, the result of questioning a representative group of people cannot be the percentage Roland cites.
- D. It is unlikely that the people whose statements Roland cites are giving accurate reports.
- E. If an unemployment figure is given as a certain percent, the actual percentage of those without jobs is even higher.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 556

Roland: The alarming fact is that 90 percent of the people in this country now report that they know someone who is unemployed.

Sharon: But a normal, moderate level of unemployment is 5 percent, with 1 out of 20 workers unemployed. So at any given time if a person knows approximately 50 workers, 1 or more will very likely be unemployed.

Sharon's argument relies on the assumption that

- A. normal levels of unemployment are rarely exceeded
- B. unemployment is not normally concentrated in geographically isolated segments of the population
- C. the number of people who each know someone who is unemployed is always higher than 90% of the population
- D. Roland is not consciously distorting the statistics he presents
- E. knowledge that a personal acquaintance is unemployed generates more fear of losing one's job than does knowledge of unemployment statistics

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 557

A company is considering changing its policy concerning daily working hours. Currently, this company requires all employees to arrive at work at 8 a.m. The proposed policy would permit each employee to decide when to arrive--from as early as 6 a.m. to as late as 11 a.m. The adoption of this policy would be most likely to decrease employees' productivity if the employees' job functions required them to

- A. work without interruption from other employees
- B. consult at least once a day with employees from other companies
- C. submit their work for a supervisor's eventual approval
- D. interact frequently with each other throughout the entire workday
- E. undertake projects that take several days to complete

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 558

The amount of time it takes for most of a worker's occupational knowledge and skills to become obsolete has been declining because of the introduction of advanced manufacturing technology (AMT). Given the rate at which AMT is currently being introduced in manufacturing, the average worker's old skills become obsolete and new skills are required within as little as five years. Which of the following plans, if feasible, would allow a company to prepare most effectively for the rapid obsolescence of skills described above?

- A. The company will develop a program to offer selected employees the opportunity to receive training six years after they were originally hired.
- B. The company will increase its investment in AMT every year for a period of at least five years.
- C. The company will periodically survey its employees to determine how the introduction of AMT has affected them.
- D. Before the introduction of AMT, the company will institute an educational program to inform its employees of the probable consequences of the introduction of AMT.
- E. The company will ensure that it can offer its employees any training necessary for meeting their job requirements.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 559

Installing scrubbers in smokestacks and switching to cleaner-burning fuel are the two methods available to Northern Power for reducing harmful emissions from its plants. Scrubbers will reduce harmful emissions more than cleaner-burning fuels will. Therefore, by installing scrubbers, Northern Power will be doing the most that can be done to reduce harmful emissions from its plants. Which of the following is an assumption on which the argument depends?

- A. Switching to cleaner-burning fuel will not be more expensive than installing scrubbers.
- B. Northern Power can choose from among various kinds of scrubbers, some of which are more effective than others.
- C. Northern Power is not necessarily committed to reducing harmful emissions from its plants.
- D. Harmful emissions from Northern Power's plants cannot be reduced more by using both methods together than by the installation of scrubbers alone.
- E. Aside from harmful emissions from the smokestacks of its plants, the activities of Northern Power do not cause significant air pollution.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 560

Some anthropologists study modern-day societies of foragers in an effort to learn about our ancient ancestors who were also foragers. A flaw in this strategy is that forager societies are extremely varied. Indeed, any forager society with which anthropologists are familiar has had considerable contact with modern nonforager societies.

Which of the following, if true, would most weaken the criticism made above of the anthropologists' strategy?

- A. All forager societies throughout history have had a number of important features in common that are absent from other types of societies.
- B. Most ancient forager societies either dissolved or made a transition to another way of life.
- C. All anthropologists study one kind or another of modern-day society.
- D. Many anthropologists who study modern-day forager societies do not draw inferences about ancient societies on the basis of their studies.
- E. Even those modern-day forager societies that have not had significant contact with modern societies are importantly different from ancient forager societies.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 561

Mayor: In each of the past five years, the city has cut school funding and each time school officials complained that the cuts would force them to reduce expenditures for essential services. But each time, only expenditures for nonessential services were actually reduced. So school officials can implement further cuts without reducing any expenditures for essential services. Which of the following, if true, most strongly supports the mayor's conclusion?

- A. The city's schools have always provided essential services as efficiently as they have provided nonessential services.
- B. Sufficient funds are currently available to allow the city's schools to provide some nonessential services.
- C. Price estimates quoted to the city's schools for the provision of nonessential services have not increased substantially since the most recent school funding cut.
- D. Few influential city administrators support the funding of costly nonessential services in the city's schools.
- E. The city's school officials rarely exaggerate the potential impact of threatened funding cuts.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 562

Advertisement: For sinus pain, three out of four hospitals give their patients Novex. So when you want the most effective painkiller for sinus pain, Novex is the one to choose. Which of the following, if true, most seriously undermines the advertisement's argument?

- A. Some competing brands of painkillers are intended to reduce other kinds of pain in addition to sinus pain.
- B. Many hospitals that do not usually use Novex will do so for those patients who cannot tolerate the drug the hospitals usually use.
- C. Many drug manufacturers increase sales of their products to hospitals by selling these products to the hospitals at the lowest price the manufacturers can afford.
- D. Unlike some competing brands of painkillers, Novex is available from pharmacies without a doctor's prescription.
- E. In clinical trials Novex has been found more effective than competing brands of painkillers that have been on the market longer than Novex.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 563

A report that many apples contain a cancer-causing preservative called Alar apparently had little effect on consumers. Few consumers planned to change their apple-buying habits as a result of the report. Nonetheless, sales of apples in grocery stores fell sharply in March, a month after the report was issued. Which of the following, if true, best explains the reason for the apparent discrepancy described above?

- A. In March, many grocers removed apples from their shelves in order to demonstrate concern about their customers' health.
- B. Because of a growing number of food-safety warnings, consumers in March were indifferent to such warnings.
- C. The report was delivered on television and also appeared in newspapers.
- D. The report did not mention that any other fruit contains Alar, although the preservative is used on other fruit.
- E. Public health officials did not believe that apples posed a health threat because only minute traces of Alar were present in affected apples.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 564

A new law gives ownership of patents--documents providing exclusive right to make and sell an invention--to universities, not the government, when those patents result from government-sponsored university research. Administrators at Logos University plan to sell any patents they acquire to corporations in order to fund programs to improve undergraduate teaching. Which of the following, if true, would cast most doubt on the viability of the college administrators' plan described above?

- A. Profit-making corporations interested in developing products based on patents held by universities are likely to try to serve as exclusive sponsors of ongoing university research projects.
- B. Corporate sponsors of research in university facilities are entitled to tax credits under new federal tax-code guidelines.
- C. Research scientists at Logos University have few or no teaching responsibilities and participate little if at all in the undergraduate programs in their field.
- D. Government-sponsored research conducted at Logos University for the most part duplicates research already completed by several profit-making corporations.
- E. Logos University is unlikely to attract corporate sponsorship of its scientific research.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 565

Contrary to earlier predictions, demand for sugarcane has not increased in recent years. Yet, even though prices and production amounts have also been stable during the last three years, sugarcane growers last year increased their profits by more than ten percent over the previous year's level. Any of the following statements, if true, about last year, helps to explain the rise in profits EXCEPT:

- A. Many countries that are large consumers of sugarcane increased their production of sugarcane-based ethanol, yet their overall consumption of sugarcane decreased.
- B. Sugarcane growers have saved money on wages by switching from paying laborers an hourly wage to paying them by the amount harvested.
- C. The price of oil, the major energy source used by sugarcane growers in harvesting their crops, dropped by over twenty percent.
- D. Many small sugarcane growers joined together to form an association of sugarcane producers and began to buy supplies at low group rates.
- E. Rainfall in sugarcane-growing regions was higher than it had been during the previous year, allowing the growers to save money on expensive artificial irrigation.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 566

If the county continues to collect residential trash at current levels, landfills will soon be overflowing and parkland will need to be used in order to create more space. Charging each household a fee for each pound of trash it puts out for collection will induce residents to reduce the amount of trash they create; this charge will therefore protect the remaining county parkland. Which of the following is an assumption made in drawing the conclusion above?

- A. Residents will reduce the amount of trash they put out for collection by reducing the number of products they buy.
- B. The collection fee will not significantly affect the purchasing power of most residents, even if their households do not reduce the amount of trash they put out.
- C. The collection fee will not induce residents to dump their trash in the parklands illegally.
- D. The beauty of county parkland is an important issue for most of the county's residents.
- E. Landfills outside the county's borders could be used as dumping sites for the county's trash.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 567

Environmentalist: The commissioner of the Fish and Game Authority would have the public believe that increases in the number of marine fish caught demonstrate that this resource is no longer endangered. This is a specious argument, as unsound as it would be to assert that the ever-increasing rate at which rain forests are being cut down demonstrates a lack of danger to that resource. The real cause of the increased fish-catch is a greater efficiency in using technologies that deplete resources. Which of the following strategies is used in the presentation of the environmentalist's position?

- A. Questioning the motives of an opponent
- B. Showing that an opposing position is self-contradictory
- C. Attacking an argument through the use of an analogy
- D. Demonstrating the inaccuracy of certain data
- E. Pointing out adverse consequences of a proposal

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 568

Environmentalist: The commissioner of the Fish and Game Authority would have the public believe that increases in the number of marine fish caught demonstrate that this resource is no longer endangered. This is a specious argument, as unsound as it would be to assert that the ever-increasing rate at which rain forests are being cut down demonstrates a lack of danger to that resource. The real cause of the increased fish-catch is a greater efficiency in using technologies that deplete resources. The environmentalist's statements, if true, best support which of the following as a conclusion?

- A. The use of technology is the reason for the increasing encroachment of people on nature.
- B. It is possible to determine how many fish are in the sea in some way other than by catching fish.
- C. The proportion of marine fish that are caught is as high as the proportion of rain-forest trees that are cut down each year.
- D. Modern technologies waste resources by catching inedible fish.
- E. Marine fish continue to be an endangered resource.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 569

Biometric access-control systems--those using fingerprints, voiceprints, etc., to regulate admittance to restricted areas--work by degrees of similarity, not by identity. After all, even the same finger will rarely leave exactly identical prints. Such systems can be adjusted to minimize refusals of access to legitimate access-seekers. Such adjustments, however, increase the likelihood of admitting impostors. Which of the following conclusions is most strongly supported by the information above?

- A. If a biometric access-control system were made to work by identity, it would not produce any correct admittance decisions.
- B. If a biometric access-control system reliably prevents impostors from being admitted, it will sometimes turn away legitimate access-seekers.

- C. Biometric access-control systems are appropriate only in situations in which admittance of impostors is less of a problem than is mistaken refusal of access.
- D. Non biometric access-control systems--based, for example, on numerical codes--are less likely than biometric ones to admit impostors.
- E. Anyone choosing an access-control system should base the choice solely on the ratio of false refusals to false admittances.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 570

Although computers can enhance people's ability to communicate, computer games are a cause of underdeveloped communication skills in children. After-school hours spent playing computer games are hours not spent talking with people. Therefore, children who spend all their spare time playing these games have less experience in interpersonal communication than other children have. The argument depends on which of the following assumptions?

- A. Passive activities such as watching television and listening to music do not hinder the development of communication skills in children.
- B. Most children have other opportunities, in addition to after-school hours, in which they can choose whether to play computer games or to interact with other people.
- C. Children who do not spend all of their after-school hours playing computer games spend at least some of that time talking with other people.
- D. Formal instruction contributes little or nothing to children's acquisition of communication skills.
- E. The mental skills developed through playing computer games do not contribute significantly to children's intellectual development.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 571

One variety of partially biodegradable plastic beverage container is manufactured from small bits of plastic bound together by a degradable bonding agent such as cornstarch. Since only the bonding agent degrades, leaving the small bits of plastic, no less plastic refuse per container is produced when such containers are discarded than when comparable non biodegradable containers are discarded. Which of the following, if true, most strengthens the argument above?

- A. Both partially biodegradable and non biodegradable plastic beverage containers can be crushed completely flat by refuse compactors.
- B. The partially biodegradable plastic beverage containers are made with more plastic than comparable non biodegradable ones in order to compensate for the weakening effect of the bonding agents.

- C. Many consumers are ecology-minded and prefer to buy a product sold in the partially biodegradable plastic beverage containers rather than in non biodegradable containers, even if the price is higher.
- D. The manufacturing process for the partially biodegradable plastic beverage containers results in less plastic waste than the manufacturing process for non biodegradable plastic beverage containers.
- E. Technological problems with recycling currently prevent the reuse as food or beverage containers of the plastic from either type of plastic beverage container.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 572

Commentator: The theory of trade retaliation states that countries closed out of any of another country's markets should close some of their own markets to the other country in order to pressure the other country to reopen its markets. If every country acted according to this theory, no country would trade with any other.

The commentator's argument relies on which of the following assumptions?

- A. No country actually acts according to the theory of trade retaliation.
- B. No country should block any of its markets to foreign trade.
- C. Trade disputes should be settled by international tribunal.
- D. For any two countries, at least one has some market closed to the other.
- E. Countries close their markets to foreigners to protect domestic producers.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 573

The chanterelle, a type of wild mushroom, grows beneath host trees such as the Douglas fir, which provide it with necessary sugars. The underground filaments of chanterelles, which extract the sugars, in turn provide nutrients and water for their hosts. Because of this mutually beneficial relationship, harvesting the chanterelles growing beneath a Douglas fir seriously endangers the tree. Which of the following, if true, casts the most doubt on the conclusion drawn above?

- A. The number of wild mushrooms harvested has increased in recent years.
- B. Chanterelles grow not only beneath Douglas firs but also beneath other host trees.

- C. Many types of wild mushrooms are found only in forests and cannot easily be grown elsewhere.
- D. The harvesting of wild mushrooms stimulates future growth of those mushrooms.
- E. Young Douglas fir seedlings die without the nutrients and water provided by chanterelle filaments

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 574

The reason much refrigerated food spoils is that it ends up out of sight at the back of the shelf. So why not have round shelves that rotate? Because such rotating shelves would have just the same sort of drawback, since things would fall off the shelves' edges into the rear corners. Which of the following is presupposed in the argument against introducing rotating shelves?

- A. Refrigerators would not be made so that their interior space is cylindrical.
- B. Refrigerators would not be made to have a window in front for easy viewing of their contents without opening the door.
- C. The problem of spoilage of refrigerated food is not amenable to any solution based on design changes.
- D. Refrigerators are so well designed that there are bound to be drawbacks to any design change.
- E. Rotating shelves would be designed to rotate only while the refrigerator door was open.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 575

It would cost Rose town one million dollars to repair all of its roads. In the year after completion of those repairs, however, Rose town would thereby avoid incurring three million dollars worth of damages, since currently Rose town pays that amount annually in compensation for damage done to cars each year by its unrepaired roads.

Which of the following, if true, gives the strongest support to the argument above?

- A. Communities bordering on Rose town also pay compensation for damage done to cars by their unrepaired roads.
- B. After any Rose town road has been repaired, several years will elapse before that road begins to damage cars.
- C. Rose town would need to raise additional taxes if it were to spend one million dollars in one year on road repairs.
- D. The degree of damage caused to Rose town's roads by harsh weather can vary widely from year to year.
- E. Trucks cause much of the wear on Rose town's roads, but owners of cars file almost all of the claims for compensation for damage caused by

unrepaired roads.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 576

Two experimental garden plots were each planted with the same number of tomato plants. Magnesium salts were added to the first plot but not to the second. The first plot produced 20 pounds of tomatoes and the second plot produced 10 pounds. Since nothing else but water was added to either plot, the higher yields in the first plot must have been due to the magnesium salts. Which of the following, if true, most seriously weakens the argument above?

- A. A small amount of the magnesium salts from the first plot leached into the second plot.
- B. Tomato plants in a third experimental plot, to which a high-nitrogen fertilizer was added, but no magnesium salts, produced 15 pounds of tomatoes.
- C. Four different types of tomatoes were grown in equal proportions in each of the plots.
- D. Some weeds that compete with tomatoes cannot tolerate high amounts of magnesium salts in the soil.
- E. The two experimental plots differed from each other with respect to soil texture and exposure to sunlight.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 577

Archaeologists have found wheeled ceramic toys made by the Toltec, twelfth-century inhabitants of what is now Vera Cruz. Although there is no archaeological evidence that the Toltec used wheels for anything but toys, some anthropologists hypothesize that wheeled utility vehicles were used to carry materials needed for the monumental structures the Toltec produced. Which of the following, if true, would most help the anthropologists explain the lack of evidence noted above?

- A. The Toltec sometimes incorporated into their toys representations of utensils or other devices that served some practical purpose.
- B. Any wheeled utility vehicles used by the Toltec could have been made entirely of wood, and unlike ceramic, wood decays rapidly in the humid climate of Vera Cruz.
- C. Carvings in monument walls suggest that the Toltec's wheeled ceramic toys sometimes had ritual uses in addition to being used by both children and adults as decorations and playthings.
- D. Wheeled utility vehicles were used during the twelfth century in many areas of the world, but during this time wheeled toys were not very common in areas outside Vera Cruz.

E. Some of the wheeled ceramic toys were found near the remains of monumental structures.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 578

Demographers doing research for an international economics newsletter claim that the average per capita income in the country of Kuptala is substantially lower than that in the country of Bahlton. They also claim, however, that whereas poverty is relatively rare in Kuptala, over half the population of Bahlton lives in extreme poverty. At least one of the demographers' claims must, therefore, be wrong. The argument above is most vulnerable to which of the following criticisms?

- A. It rejects an empirical claim about the average per capita incomes in the two countries without making any attempt to discredit that claim by offering additional economic evidence.
- B. It treats the vague term "poverty" as though it had a precise and universally accepted meaning.
- C. It overlooks the possibility that the number of people in the two countries who live in poverty could be the same even though the percentages of the two populations that live in poverty differ markedly.
- D. It fails to show that wealth and poverty have the same social significance in Kuptala as in Bahlton.
- E. It does not consider the possibility that incomes in Kuptala, unlike those in Bahlton, might all be very close to the country's average per capita income.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 579

Normally, increases in the price of a product decrease its sales except when the price increase accompanies an improvement in the product. Wine is unusual, however. Often increases in the price of a particular producer's wine will result in increased sales, even when the wine itself is unchanged. Which of the following, if true, does most to explain the anomaly described above?

- A. The retail wine market is characterized by an extremely wide range of competing products.
- B. Many consumers make decisions about which wines to purchase on the basis of reviews of wine published in books and periodicals.
- C. Consumers selecting wine in a store often use the price charged as their main guide to the wine's quality.
- D. Wine retailers and producers can generally increase the sales of a particular wine temporarily by introducing a price discount.

E. Consumers who purchase wine regularly generally have strong opinions about which wines they prefer.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 580

The recent decline in land prices has hurt many institutions that had invested heavily in real estate. Last year, before the decline began, a local college added 2,000 acres to its holdings. The college, however, did not purchase the land but received it as a gift. Therefore the price decline will probably not affect the college.

Which of the following, if true, casts most doubt on the conclusion above?

- A. The 2,000 acres that the college was given last year are located within the same community as the college itself.
- B. The college usually receives more contributions of money than of real estate.
- C. Land prices in the region in which the college is located are currently higher than the national average.
- D. Last year, the amount that the college allocated to pay for renovations included money it expected to receive by selling some of its land this year.
- E. Last year, the college paid no property taxes on land occupied by college buildings but instead paid fees to compensate the local government for services provided.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 581

Civil trials often involve great complexities that are beyond the capacities of jurors to understand. As a result, jurors' decisions in such trials are frequently incorrect. Justice would therefore be better served if the more complex trials were decided by judges rather than juries. The argument above depends on which of the following assumptions?

- A. A majority of civil trials involve complexities that jurors are not capable of understanding.
- B. The judges who would decide complex civil trials would be better able to understand the complexities of those trials than jurors are.
- C. The judges who would preside over civil trials would disallow the most complex sorts of evidence from being introduced into those trials.
- D. Jurors' decisions are frequently incorrect even in those civil trials that do not involve great complexities.
- E. The sole reason in favor of having juries decide civil trials is the supposition that their decisions will almost always be correct.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 582

Some species of dolphins find their prey by echolocation; they emit clicking sounds and listen for echoes returning from distant objects in the water. Marine biologists have speculated that those same clicking sounds might have a second function: particularly loud clicks might be used by the dolphins to stun their prey at close range through sensory overload. Which of the following, if discovered to be true, would cast the most serious doubt on the correctness of the speculation described above?

- A. Dolphins that use echolocation to locate distant prey also emit frequent clicks at intermediate distances as they close in on their prey.
- B. The usefulness of echolocation as a means of locating prey depends on the clicking sounds being of a type that the prey is incapable of perceiving, regardless of volume.
- C. If dolphins stun their prey, the effect is bound to be so temporary that stunning from far away, even if possible, would be ineffective.
- D. Echolocation appears to give dolphins that use it information about the richness of a source of food as well as about its direction.
- E. The more distant a dolphin's prey, the louder the echolocation clicks must be if they are to reveal the prey's presence to the hunting dolphin.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 583

Advertisement: The world's best coffee beans come from Colombia. The more Colombian beans in a blend of coffee, the better the blend, and no company purchases more Colombian beans than Kreemo Coffee, Inc. So it only stands to reason that if you buy a can of Kreemo's coffee, you're buying the best blended coffee available today.

The reasoning of the argument in the advertisement is flawed because it overlooks the possibility that

- A. the equipment used by Kreemo to blend and package its coffee is no different from that used by most other coffee producers
- B. not all of Kreemo's competitors use Colombian coffee beans in the blends of coffee they sell
- C. Kreemo sells more coffee than does any other company
- D. Kreemo's coffee is the most expensive blended coffee available today
- E. the best unblended coffee is better than the best blended coffee

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 584

The only purpose for which a particular type of tape is needed is to hold certain surgical wounds closed for ten days--the maximum time such wounds need tape. New tape is a new brand of this type of tape. New tape's salespeople claim that New tape will improve healing because New tape adheres twice as long as the currently used tape does.

Which of the following statements, if true, would most seriously call into question the claim made by New tape's salespeople?

- A. Most surgical wounds take about ten days to heal.
- B. Most surgical tape is purchased by hospitals and clinics rather than by individual surgeons.
- C. The currently used tape's adhesiveness is more than sufficient to hold wounds closed for ten days.
- D. Neither New tape nor the currently used tape adheres well to skin that has not been cleaned.
- E. New tape's adhesion to skin that has been coated with a special chemical preparation is only half as good as the currently used tape's adhesion to such coated skin.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 585

A severe drought can actually lessen the total amount of government aid that United States farmers receive as a group. The government pays farmers the amount, if any, by which the market price at which crops are actually sold falls short of a preset target price per bushel for the crops. The drought of 1983, for example, caused farm-program payments to drop by \$10 billion. Given the information above, which of the following, if true, best explains why the drought of 1983 resulted in a reduction in farm-program payments?

- A. Prior to the drought of 1983, the government raised the target price for crops in order to aid farmers in reducing their debt loads.
- B. Due to the drought of 1983, United States farmers exported less food in 1983 than in the preceding year.
- C. Due to the drought of 1983, United States farmers had smaller harvests and thus received a higher market price for the 1983 crop than for the larger crop of the preceding year.
- D. Due to the drought of 1983, United States farmers planned to plant smaller crops in 1984 than they had in 1983.
- E. Despite the drought of 1983, retail prices for food did not increase significantly between 1982 and 1983.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 586

In order to increase revenues, an airport plans to change the parking fees it charges at its hourly parking lots. Rather than charging \$2.00 for the first two-hour period, or part thereof, and \$1.00 for each hour thereafter, the airport will charge \$4.00 for the first four-hour period, or part thereof, and \$1.00 for each hour thereafter.

Which of the following is a consideration that, if true, suggests that the plan will be successful in increasing revenues?

- A. Very few people who park their cars at the hourly parking lot at the airport leave their cars for more than two hours at a time.
- B. Over the past several years, the cost to the airport of operating its hourly parking facilities has been greater than the revenues it has received from them.
- C. People who leave their cars at the airport while on a trip generally park their cars in lots that charge by the day rather than by the hour.
- D. A significant portion of the money spent to operate the airport parking lot is spent to maintain the facilities rather than to pay the salaries of the personnel who collect the parking fees.
- E. The hourly parking lots at the airport have recently been expanded and are therefore rarely filled to capacity.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 587

In the course of her researches, a historian recently found two documents mentioning the same person, Erich Schnitzler. One, dated May 3, 1739, is a record of Schnitzler's arrest for peddling without a license. The second, undated, is a statement by Schnitzler asserting that he has been peddling off and on for 20 years.

The facts above best support which of the following conclusions?

- A. Schnitzler started peddling around 1719.
- B. Schnitzler was arrested repeatedly for peddling.
- C. The undated document was written before 1765.
- D. The arrest record was written after the undated document.
- E. The arrest record provides better evidence that Schnitzler peddled than does the undated document.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 588

The recent upheaval in the office-equipment retail business, in which many small firms have gone out of business, has been attributed to the advent of office equipment "superstores" whose high sales volume keeps their prices low. This analysis is flawed, however, since even today the superstores control a very small share of the retail market.

Which of the following, if true, would most weaken the argument that the analysis is flawed?

- A. Most of the larger customers for office equipment purchase under contract directly from manufacturers and thus do not participate in the retail market.
- B. The superstores' heavy advertising of their low prices has forced prices down throughout the retail market for office supplies.
- C. Some of the superstores that only recently opened have themselves gone out of business.
- D. Most of the office equipment superstores are owned by large retailing chains that also own stores selling other types of goods.
- E. The growing importance of computers in most offices has changed the kind of office equipment retailers must stock.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 589

A report on acid rain concluded, "Most forests in Canada are not being damaged by acid rain." Critics of the report insist the conclusion be changed to, "Most forests in Canada do not show visible symptoms of damage by acid rain, such as abnormal loss of leaves, slower rates of growth, or higher mortality."

Which of the following, if true, provides the best logical justification for the critics' insistence that the report's conclusion be changed?

- A. Some forests in Canada are being damaged by acid rain.
- B. Acid rain could be causing damage for which symptoms have not yet become visible.
- C. The report does not compare acid rain damage to Canadian forests with acid rain damage to forests in other countries.
- D. All forests in Canada have received acid rain during the past fifteen years.
- E. The severity of damage by acid rain differs from forest to forest.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 590

In the past most airline companies minimized aircraft weight to minimize fuel costs. The safest airline seats were heavy, and airlines equipped their planes with few of these seats. This year the seat that has sold best to airlines has been the safest one--a clear indication that airlines are assigning a higher priority to safe seating than to minimizing fuel costs.

Which of the following, if true, most seriously weakens the argument above?

- A. Last year's best-selling airline seat was not the safest airline seat on the market.
- B. No airline company has announced that it would be making safe seating a higher priority this year.
- C. The price of fuel was higher this year than it had been in most of the years when the safest airline seats sold poorly.
- D. Because of increases in the cost of materials, all airline seats were more expensive to manufacture this year than in any previous year.
- E. Because of technological innovations, the safest airline seat on the market this year weighed less than most other airline seats on the market.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 591

A computer equipped with signature-recognition software, which restricts access to a computer to those people whose signatures are on file, identifies a person's signature by analyzing not only the form of the signature but also such characteristics as pen pressure and signing speed. Even the most adept forgers cannot duplicate all of the characteristics the program analyzes. Which of the following can be logically concluded from the passage above?

- A. The time it takes to record and analyze a signature makes the software impractical for everyday use.
- B. Computers equipped with the software will soon be installed in most banks.
- C. Nobody can gain access to a computer equipped with the software solely by virtue of skill at forging signatures.
- D. Signature-recognition software has taken many years to develop and perfect.
- E. In many cases even authorized users are denied legitimate access to computers equipped with the software.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 592

Division manager: I want to replace the Microton computers in my division with Vitech computers.

General manager: Why?

Division manager: It costs 28 percent less to train new staff on the Vitech. General manager: But that is not a good enough reason. We can simply hire only people who already know how to use the Microton computer.

Which of the following, if true, most seriously undermines the general manager's objection to the replacement of Microton computers with Vitechs?

- A. Currently all employees in the company are required to attend workshops on how to use Microton computers in new applications.
- B. Once employees learn how to use a computer, they tend to change employers more readily than before.
- C. Experienced users of Microton computers command much higher salaries than do prospective employees who have no experience in the use of computers.
- D. The average productivity of employees in the general manager's company is below the average productivity of the employees of its competitors.
- E. The high costs of replacement parts make Vitech computers more expensive to maintain than Microton computers.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 593

An airplane engine manufacturer developed a new engine model with safety features lacking in the earlier model, which was still being manufactured. During the first year that both were sold, the earlier model far outsold the new model; the manufacturer thus concluded that safety was not the customers' primary consideration.

Which of the following, if true, would most seriously weaken the manufacturer's conclusion?

- A. Both private plane owners and commercial airlines buy engines from this airplane engine manufacturer.
- B. Many customers consider earlier engine models better safety risks than new engine models, since more is usually known about the safety of the earlier models.
- C. Many customers of this airplane engine manufacturer also bought airplane engines from manufacturers who did not provide additional safety features in their newer models.
- D. The newer engine model can be used in all planes in which the earlier engine model can be used.
- E. There was no significant difference in price between the newer engine model and the earlier engine model.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 594

Between 1975 and 1985, nursing-home occupancy rates averaged 87 percent of capacity, while admission rates remained constant, at an average of 95

admissions per 1,000 beds per year. Between 1985 and 1988, however, occupancy rates rose to an average of 92 percent of capacity, while admission rates declined to 81 per 1,000 beds per year.

If the statements above are true, which of the following conclusions can be most properly drawn?

- A. The average length of time nursing-home residents stayed in nursing homes increased between 1985 and 1988.
- B. The proportion of older people living in nursing homes was greater in 1988 than in 1975.
- C. Nursing home admission rates tend to decline whenever occupancy rates rise.
- D. Nursing homes built prior to 1985 generally had fewer beds than did nursing homes built between 1985 and 1988.
- E. The more beds a nursing home has, the higher its occupancy rate is likely to be.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 595

Firms adopting "profit-related-pay" (PRP) contracts pay wages at levels that vary with the firm's profits. In the metalworking industry last year, firms with PRP contracts in place showed productivity per worker on average 13 percent higher than that of their competitors who used more traditional contracts. If, on the basis of the evidence above, it is argued that PRP contracts increase worker productivity, which of the following, if true, would most seriously weaken that argument?

- A. Results similar to those cited for the metalworking industry have been found in other industries where PRP contracts are used.
- B. Under PRP contracts costs other than labor costs, such as plant, machinery, and energy, make up an increased proportion of the total cost of each unit of output.
- C. Because introducing PRP contracts greatly changes individual workers' relationships to the firm, negotiating the introduction of PRP contracts is complex and time consuming.
- D. Many firms in the metalworking industry have modernized production equipment in the last five years, and most of these introduced PRP contracts at the same time.
- E. In firms in the metalworking industry where PRP contracts are in place, the average take-home pay is 15 percent higher than it is in those firms where workers have more traditional contracts.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 596

Crops can be traded on the futures market before they are harvested. If a poor corn harvest is predicted, prices of corn futures rise; if a bountiful corn harvest is predicted, prices of corn futures fall. This morning meteorologists are predicting much-needed rain for the corn-growing region starting tomorrow. Therefore, since adequate moisture is essential for the current crop's survival, prices of corn futures will fall sharply today. Which of the following, if true, most weakens the argument above?

- A. Corn that does not receive adequate moisture during its critical pollination stage will not produce a bountiful harvest.
- B. Futures prices for corn have been fluctuating more dramatically this season than last season.
- C. The rain that meteorologists predicted for tomorrow is expected to extend well beyond the corn- growing region.
- D. Agriculture experts announced today that a disease that has devastated some of the corn crop will spread widely before the end of the growing season.
- E. Most people who trade in corn futures rarely take physical possession of the corn they trade.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 597

A discount retailer of basic household necessities employs thousands of people and pays most of them at the minimum wage rate. Yet following a federally mandated increase of the minimum wage rate that increased the retailer's operating costs considerably, the retailer's profits increased markedly. Which of the following, if true, most helps to resolve the apparent paradox?

- A. Over half of the retailer's operating costs consist of payroll expenditures; yet only a small percentage of those expenditures go to pay management salaries.
- B. The retailer's customer base is made up primarily of people who earn, or who depend on the earnings of others who earn, the minimum wage.
- C. The retailer's operating costs, other than wages, increased substantially after the increase in the minimum wage rate went into effect.
- D. When the increase in the minimum wage rate went into effect, the retailer also raised the wage rate for employees who had been earning just above minimum wage.
- E. The majority of the retailer's employees work as cashiers, and most cashiers are paid the minimum wage.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 598

The cotton farms of Country Q became so productive that the market could not absorb all that they produced. Consequently, cotton prices fell. The

government tried to boost cotton prices by offering farmers who took 25 percent of their cotton acreage out of production direct support payments up to a specified maximum per farm.

The government's program, if successful, will not be a net burden on the budget. Which of the following, if true, is the best basis for an explanation of how this could be so?

- A. Depressed cotton prices meant operating losses for cotton farms, and the government lost revenue from taxes on farm profits.
- B. Cotton production in several counties other than Q declined slightly the year that the support- payment program went into effect in Q.
- C. The first year that the support-payment program was in effect, cotton acreage in Q was 5% below its level in the base year for the program.
- D. The specified maximum per farm meant that for very large cotton farms the support payments were less per acre for those acres that were withdrawn from production than they were for smaller farms.
- E. Farmers who wished to qualify for support payments could not use the cotton acreage that was withdrawn from production to grow any other crop.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 599

United States hospitals have traditionally relied primarily on revenues from paying patients to offset losses from unreimbursed care. Almost all paying patients now rely on governmental or private health insurance to pay hospital bills. Recently, insurers have been strictly limiting what they pay hospitals for the care of insured patients to amounts at or below actual costs. Which of the following conclusions is best supported by the information above?

- A. Although the advance of technology has made expensive medical procedures available to the wealthy, such procedures are out of the reach of low-income patients.
- B. If hospitals do not find ways to raising additional income for unreimbursed care, they must either deny some of that care or suffer losses if they give it.
- C. Some patients have incomes too high for eligibility for governmental health insurance but are unable to afford private insurance for hospital care.
- D. If the hospitals reduce their costs in providing care, insurance companies will maintain the current level of reimbursement, thereby providing more funds for unreimbursed care.
- E. Even though philanthropic donations have traditionally provided some support for the hospitals, such donations are at present declining.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 600

Generally scientists enter their field with the goal of doing important new research and accept as their colleagues those with similar motivation. Therefore, when any scientist wins renown as an expounder of science to general audiences, most other scientists conclude that this popularizer should no longer be regarded as a true colleague.

The explanation offered above for the low esteem in which scientific popularizers are held by research scientists assumes that

- A. serious scientific research is not a solitary activity, but relies on active cooperation among a group of colleagues
- B. research scientists tend not to regard as colleagues those scientists whose renown they envy
- C. a scientist can become a famous popularizer without having completed any important research
- D. research scientists believe that those who are well known as popularizers of science are not motivated to do important new research
- E. no important new research can be accessible to or accurately assessed by those who are not themselves scientists

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 601

Mouth cancer is a danger for people who rarely brush their teeth. In order to achieve early detection of mouth cancer in these individuals, a town's public health officials sent a pamphlet to all town residents, describing how to perform weekly self-examinations of the mouth for lumps. Which of the following, if true, is the best criticism of the pamphlet as a method of achieving the public health officials' goal?

- A. Many dental diseases produce symptoms that cannot be detected in a weekly self-examination.
- B. Once mouth cancer has been detected, the effectiveness of treatment can vary from person to person.
- C. The pamphlet was sent to all town residents, including those individuals who brush their teeth regularly.
- D. Mouth cancer is much more common in adults than in children.
- E. People who rarely brush their teeth are unlikely to perform a weekly examination of their mouth.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 602

Technological improvements and reduced equipment costs have made converting solar energy directly into electricity far more cost-efficient in the last decade. However, the threshold of economic viability for solar power (that is, the price per barrel to which oil would have to rise in order for new solar power plants to be more economical than new oil-fired power plants) is unchanged at thirty-five dollars. Which of the following, if true, does most to help explain why the increased cost-efficiency of solar power has not decreased its threshold of economic viability?

- A. The cost of oil has fallen dramatically.
- B. The reduction in the cost of solar-power equipment has occurred despite increased raw material costs for that equipment.
- C. Technological changes have increased the efficiency of oil-fired power plants.
- D. Most electricity is generated by coal-fired or nuclear, rather than oil-fired, power plants.
- E. When the price of oil increases, reserves of oil not previously worth exploiting become economically viable.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 603

Start-up companies financed by venture capitalist have a much lower failure rate than companies financed by other means. Source of financing, therefore, must be a more important causative factor in the success of a start-up company than are such factors as the personal characteristics of the entrepreneur, the quality of strategic planning, or the management structure of the company. Which of the following, if true, most seriously weakens the argument above?

- A. Venture capitalists tend to be more responsive than other sources of financing to changes in a start-up company's financial needs.
- B. The strategic planning of a start-up company is a less important factor in the long-term success of the company than are the personal characteristics of the entrepreneur.
- C. More than half of all new companies fall within five years.
- D. The management structures of start-up companies are generally less formal than the management structures of ongoing businesses.
- E. Venture capitalists base their decisions to fund start-up companies on such factors as the characteristics of the entrepreneur and quality of strategic planning of the company.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 604

The proportion of women among students enrolled in higher education programs has increased over the past decades. This is partly shown by the fact that in 1959, only 11 percent of the women between twenty and twenty-one were enrolled in college, while in 1981, 30 percent of the women between twenty and twenty-one were enrolled in college.

To evaluate the argument above, it would be most useful to compare 1959 and 1981 with regard to which of the following characteristics?

- A. The percentage of women between twenty and twenty-one who were not enrolled in college
- B. The percentage of women between twenty and twenty-five who graduated from college
- C. The percentage of women who, after attending college, entered highly paid professions
- D. The percentage of men between twenty and twenty-one who were enrolled in college
- E. The percentage of men who graduated from high school

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 605

Since a rhinoceros that has no horn is worthless to poachers, the Wildlife Protection Committee plans to protect selected rhinoceroses from being killed by poachers by cutting off the rhinos' horns.

The Wildlife Protection Committee's plan assumes that

- A. poachers do not kill rhinos that are worthless to them
- B. hornless rhinos pose less of a threat to humans, including poachers, than do rhinos that have horns
- C. rhinos are the only animals poachers kill for their horns
- D. hornless rhinos can successfully defend their young against nonhuman predators
- E. imposing more stringent penalties on poachers will not decrease the number of rhinos killed by poachers

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

Accurate.

QUESTION 606

Crimes are mainly committed by the young, and for this reason merely increasing the number of police officers or expenditures on police services has little effect on reducing the crime rate. In fact, the only factor associated with a crime-rate drop is a decrease in the number of people in the community aged fourteen to thirty.

The findings above can best serve as part of an argument against

- A. the likelihood that any law enforcement program will be effective in reducing the crime rate within a short time
- B. increasing prison terms for young people found guilty of crimes
- C. introducing compulsory military conscription for people aged seventeen to nineteen

- D. raising the age at which students are permitted to leave school
- E. a community's plan to increase the number of recreational and educational activities in which young adults can participate

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 607

A 20 percent decline in lobster catches in Maine waters since 1980 can be justifiably blamed on legislation passed in 1972 to protect harbor seals. Maine's population of harbor seals is now double the level existing before protection was initiated, and these seals are known to eat both fish and lobsters. Which of the following, if true, would most seriously weaken the argument above?

- A. Harbor seals usually eat more fish than lobsters, but the seals are natural predators of both.
- B. Although harbor seals are skillful predators of lobsters, they rarely finish eating their catch.
- C. Harbor seals attract tourists to Maine's coastal areas, thus revitalizing the local economy.
- D. Authors of the 1972 legislation protecting harbor seals were convinced that an increase in that animal's numbers would not have a measurably negative impact on the lobster catch.
- E. The record lobster harvests of the late 1970's removed large numbers of mature lobsters from the reproductive stock.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 608

Politician: Fewer people are entering the labor market now than previously. If the economy grows, the demand for motivated and educated people will far outstrip the supply. Some companies have already started to respond to this labor-market situation by finding better ways to keep their current employees. Their concern is a sure indicator that the economy is growing. Which of the following is the best criticism of the politician's reasoning?

- A. The fact that companies are making prudent preparations for a possible future development does not mean that this development is already taking place.
- B. The fact that some companies now try harder to keep their employees does not mean that they used to be indifferent to employee morale.
- C. The fact that demand will outstrip supply does not mean that there will be no supply at all.
- D. The fact that the number of new entrants into the labor market is declining does not mean that the number of new entrants is lower than it has ever been.

- E. The fact that current employees have become more valuable to some companies does not mean that those employees will do their jobs better than they used to.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 609

Under current federal law, employers are allowed to offer their employees free parking spaces as a tax-free benefit, but they can offer employees only up to \$180 per year as a tax-free benefit for using mass transit. The government could significantly increase mass transit rider ship by raising the limit of this benefit to meet commuters' transportation costs.

The proposal above to increase mass transit rider ship assumes that

- A. current mass transit systems are subject to unexpected route closings and delays
- B. using mass transit creates less air pollution per person than using a private automobile
- C. the parking spaces offered by employers as tax-free benefits can be worth as much as \$2,500 per year
- D. many employees are deterred by financial considerations from using mass transit to commute to their places of employment
- E. because of traffic congestion on major commuter routes, it is often faster to travel to one's place of employment by means of mass transit than by private automobile

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 610

Which of the following best completes the passage below? "Government" does not exist as an independent entity defining policy. Instead there exists a group of democratically elected pragmatists sensitive to the electorate, who establish policies that will result in their own reelection. Therefore, if public policy is hostile to, say, environmental concerns, it is not because of governmental perversity but because elected officials believe that_____

- A. environmentalists would be extremely difficult to satisfy with any policy, however environmentally sound
- B. environmental concerns are being accommodated as well as public funds permit
- C. the public is overly anxious about environmental deterioration
- D. the majority of voters vote for certain politicians because of those politicians' idiosyncratic positions on policy issues
- E. the majority of voters do not strongly wish for a different policy

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 611

Fresh potatoes generally cost about \$2 for a 10-pound bag, whereas dehydrated instant potatoes cost, on average, about \$3 per pound. It can be concluded that some consumers will pay 15 times as much for convenience, since sales of this convenience food continue to rise. Which of the following, if true, indicates that there is a major flaw in the argument above?

- A. Fresh potatoes bought in convenient 2-pound bags are about \$1 a bag, or 2 1/2 times more expensive than fresh potatoes bought in 10-pound bags.
- B. Since fresh potatoes are 80 percent water, one pound of dehydrated potatoes is the equivalent of 5 pounds of fresh potatoes.
- C. Peeled potatoes in cans are also more expensive than the less convenient fresh potatoes.
- D. Retail prices of dehydrated potatoes have declined by 20 percent since 1960 to the current level of about \$3 a pound.
- E. As a consequence of labor and processing costs, all convenience foods cost more than the basic foods from which they are derived.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 612

Consumers in California seeking personal loans have fewer banks to turn to than do consumers elsewhere in the United States. This shortage of competition among banks explains why interest rates on personal loans in California are higher than in any other region of the United States. Which of the following, if true, most substantially weakens the conclusion above?

- A. Because of the comparatively high wages they must pay to attract qualified workers, California banks charge depositors more than banks elsewhere do for many of the services they offer.
- B. Personal loans are riskier than other types of loans, such as home mortgage loans, that banks make.
- C. Since bank deposits in California are covered by the same type of insurance that guarantees bank deposits in other parts of the United States, they are no less secure than deposits elsewhere.
- D. The proportion of consumers who default on their personal loans is lower in California than in any other region of the United States.
- E. Interest rates paid by California banks to depositors are lower than those paid by banks in other parts of the United States because in California there is less competition to attract depositors.

Correct Answer: A

Section: Critical Reasoning Questions**Explanation****Explanation/Reference:****QUESTION 613**

Technically a given category of insurance policy is under priced if, over time, claims against it plus expenses associated with it exceed total income from premiums. But premium income can be invested and will then yield returns of its own. Therefore, an under priced policy does not represent a net loss in every case.

The argument above is based on which of the following assumptions?

- A. No insurance policies are deliberately under priced in order to attract customers to the insurance company offering such policies.
- B. A policy that represents a net loss to the insurance company is not an under priced policy in every case.
- C. There are policies for which the level of claims per year can be predicted with great accuracy before premiums are set.
- D. The income earned by investing premium income is the most important determinant of an insurance company's profits.
- E. The claims against at least some under priced policies do not require paying out all of the premium income from those policies as soon as it is earned.

Correct Answer: E

Section: Critical Reasoning Questions**Explanation****Explanation/Reference:****QUESTION 614**

Purebred cows native to Mongolia produce, on average, 400 liters of milk per year; if Mongolian cattle are crossbred with European breeds, the crossbred cows can produce, on average, 2,700 liters per year. An international agency plans to increase the profitability of Mongolia's dairy sector by encouraging widespread crossbreeding of native Mongolian cattle with European breeds. Which of the following, if true, casts the most serious doubt on the viability of the agency's plan?

- A. Not all European breeds of cattle can be successfully bred with native Mongolian cattle.
- B. Many young Mongolians now regard cattle raising as a low-status occupation because it is less lucrative than other endeavors open to them.
- C. Mongolia's terrain is suitable for grazing native herds but not for growing the fodder needed to keep crossbred animals healthy.
- D. Cowhide and leather products, not milk, make up the bulk of Mongolia's animal product exports to Europe.
- E. Many European breeds of cattle attain average milk production levels exceeding 2,700 liters.

Correct Answer: C

Section: Critical Reasoning Questions**Explanation**

Explanation/Reference:**QUESTION 615**

Any combination of overwork and stress inevitably leads of insomnia. Managers at HiCorp, Inc., all suffer from stress. A majority of the managers--despite their doctors' warnings--work well over 60 hours per week, whereas the other managers work no more than the normal 40 hours per week. HiCorp gives regular bonuses only to employees who work more than 40 hours per week. Which of the following conclusions is most strongly supported by the statements above?

- A. Managers at HiCorp work under conditions that are more stressful than the conditions under which managers at most other companies work.
- B. Most of the employee bonuses given by HiCorp are given to managers.
- C. At HiCorp, insomnia is more widespread among managers than among any other group of employees.
- D. No manager at HiCorp who works only 40 hours per week suffers from overwork.
- E. Most of the managers at HiCorp who receive regular bonuses have insomnia.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:**QUESTION 616**

Holiday receipts--the total sales recorded in the fourth quarter of the year--determine the economic success or failure of many retail businesses. Camco, a retailer selling just one camera model, is an excellent example. Camco's holiday receipts, on average, account for a third of its yearly total receipts and about half of its yearly profits.

If the statements above are true, which of the following must also be true about Camco on the basis of them?

- A. Its fixed expenses per camera sold are higher during the fourth quarter than for any of the other three quarters.
- B. It makes more profit during the first and third quarters combined than during the fourth quarter.
- C. Its per-camera retail price is lower, on average, during the fourth quarter than during any one of the first three quarters.
- D. It makes less profit, on average, for a given dollar amount of sales during the first three quarters combined than during the fourth quarter.
- E. The per-camera price it pays to wholesalers is higher, on average, during the fourth quarter than during any of the other three quarters.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 617

Canadians now increasingly engage in "out-shopping," which is shopping across the national border, where prices are lower. Prices are lower outside of Canada in large part because the goods-and-services tax that pays for Canadian social services is not applied. Which one of the following is best supported on the basis of the information above?

- A. If the upward trend in out-shopping continues at a significant level and the amounts paid by the government for Canadian social services are maintained, the Canadian goods-and-services tax will be assessed at a higher rate.
- B. If Canada imposes a substantial tariff on the goods bought across the border, a reciprocal tariff on cross-border shopping in the other direction will be imposed, thereby harming Canadian businesses.
- C. The amounts the Canadian government pays out to those who provide social services to Canadians are increasing.
- D. The same brands of goods are available to Canadian shoppers across the border as are available in Canada.
- E. Out-shopping purchases are subject to Canadian taxes when the purchaser crosses the border to bring them into Canada.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 618

Surveys indicate that 52 percent of all women aged eighteen to sixty-five are in the labor force (employed outside the home) in any given month. On the basis of these surveys, a market researcher concluded that 48 percent of all women aged eighteen to sixty-five are full-time homemakers year-round. Which of the following, if true, would most seriously weaken the researcher's conclusion?

- A. More women are in the labor force today than during any other period since the Second World War.
- B. Many workers, both men and women, enter and exit the labor force frequently.
- C. Although only a small sample of the total population is surveyed each month, these samples have been found to be a reliable indicator of total monthly employment.
- D. Surveys show that more women than ever before consider having a rewarding job an important priority.
- E. Women who are in the labor force have more discretionary income available to them than do women who are not.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 619

Left-handed persons suffer more frequently than do right-handed persons from certain immune disorders, such as allergies. Left-handers tend to have

an advantage over the right-handed majority, however, on tasks controlled by the right hemisphere of the brain, and mathematical reasoning is strongly under the influence of the right hemisphere in most people. If the information above is true, it best supports which of the following hypotheses?

- A. Most people who suffer from allergies or other such immune disorders are left-handed rather than right-handed.
- B. Most left-handed mathematicians suffer from some kind of allergy.
- C. There are proportionally more left-handers among people whose ability to reason mathematically is above average than there are among people with poor mathematical reasoning ability.
- D. If a left-handed person suffers from an allergy, that person will probably be good at mathematics.
- E. There are proportionally more people who suffer from immune disorders such as allergies than there are people who are left-handed or people whose mathematical reasoning ability is unusually good.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 620

After observing the Earth's weather patterns and the 11-year sunspot cycle of the Sun for 36 years, scientists have found that high levels of sunspot activity precede shifts in wind patterns that affect the Earth's weather. One can conclude that meteorologists will be able to improve their weather forecasts based on this information.

Which of the following, if true, most seriously weakens the argument above?

- A. Weather forecasts are more detailed today than they were 36 years ago.
- B. Scientists can establish that sunspot activity directly affects the Earth's weather.
- C. Evidence other than sunspot activity has previously enabled meteorologists to forecast the weather conditions that are predictable on the basis of sunspot activity.
- D. Scientists have not determined why the sunspot activity on the Sun follows an 11-year cycle.
- E. It has been established that predictable wind patterns yield predictable weather patterns.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 621

A publisher is now providing university professors with the option of ordering custom textbooks for their courses. The professors can edit out those chapters of a book they are not interested in and add material of their own choosing.

The widespread use of the option mentioned above is LEAST likely to contribute to fulfilling which of the following educational objectives?

- A. Coverage of material relevant to a particular student body's specific needs
- B. Offering advanced elective courses that pursue in-depth investigation of selected topics in a field
- C. Ensuring that students nationwide engaged in a specific course of study are uniformly exposed to a basic set of readings
- D. Making the textbooks used in university courses more satisfactory from the individual teacher's point of view
- E. Keeping students' interest in a course by offering lively, well-written reading assignments

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 622

Mechanicorp's newest product costs so little to make that it appears doubtful the company will be able to sell it without increasing the markup the company usually allows for profit: potential clients would simply not believe that something so inexpensive would really work. Yet Mechanicorp's reputation is built on fair prices incorporating only modest profit margins. The statements above, if true, most strongly support which of the following?

- A. Mechanicorp will encounter difficulties in trying to set a price for its newest product that will promote sales without threatening to compromise the company's reputation.
- B. Mechanicorp achieves large annual profits, despite small profits per unit sold, by means of a high volume of sales.
- C. Mechanicorp made a significant computational error in calculating the production costs for its newest product.
- D. Mechanicorp's newest product is intended to perform tasks that can be performed by other devices costing less to manufacture.
- E. Mechanicorp's production processes are designed with the same ingenuity as are the products that the company makes.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 623

Companies in the country of Kollontay can sell semiconductors in the country of Valdivia at a price that is below the cost to Valdivian companies of producing them. To help those Valdivian companies, the Valdivian legislature plans to set a minimum selling price in Valdivia for semiconductors manufactured in Kollontay that is ten percent greater than the average production costs for companies in Valdivia.

Which of the following, if true, most seriously threatens the success of the plan?

- A. The annual rate of inflation in Kollontay is expected to exceed ten percent within the next year.
- B. Valdivia is not the only country where companies in Kollontay currently sell semiconductors.
- C. Some Valdivian companies that sell semiconductors have announced that they plan to decrease their price for semiconductors.
- D. The government of Kollontay will also set a minimum price for selling semiconductors in that country.
- E. Emerging companies in countries other than Kollontay will still be able to sell semiconductors in Valdivia at a price below the cost to Valdivian companies to manufacture them.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 624

An experimental microwave clothes dryer heats neither air nor cloth. Rather, it heats water on clothes, thereby saving electricity and protecting delicate fibers by operating at a lower temperature. Microwaves are waves that usually heat metal objects, but developers of a microwave dryer are perfecting a process that will prevent thin metal objects such as hairpins from heating up and burning clothes.

Which of the following, if true, most strongly indicates that the process, when perfected, will be insufficient to make the dryer readily marketable?

- A. Metal snap fasteners on clothes that are commonly put into drying machines are about the same thickness as most hairpins.
- B. Many clothes that are currently placed into mechanical dryers are not placed there along with hairpins or other thin metal objects.
- C. The experimental microwave dryer uses more electricity than future, improved models would be expected to use.
- D. Drying clothes with the process would not cause more shrinkage than the currently used mechanical drying process causes.
- E. Many clothes that are frequently machine-dried by prospective customers incorporate thick metal parts such as decorative brass studs or buttons.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 625

Airplane manufacturer: I object to your characterization of our X-387 jets as dangerous. No X-387 in commercial use has ever crashed or even had a serious malfunction. Airline regulator: The problem with the X-387 is not that it, itself, malfunctions, but that it creates a turbulence in its wake that can create hazardous conditions for aircraft in its vicinity. The airline regulator responds to the manufacturer by doing which of the following?

- A. Characterizing the manufacturer's assertion as stemming from subjective interest rather than from objective evaluation of the facts
- B. Drawing attention to the fact that the manufacturer's interpretation of the word "dangerous" is too narrow

- C. Invoking evidence that the manufacturer has explicitly dismissed as irrelevant to the point at issue
- D. Citing statistical evidence that refutes the manufacturer's claim
- E. Casting doubt on the extent of the manufacturer's knowledge of the number of recent airline disasters

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 626

Damaged nerves in the spinal cord do not regenerate themselves naturally, nor even under the spur of nerve-growth stimulants. The reason, recently discovered, is the presence of nerve-growth inhibitors in the spinal cord. Antibodies that deactivate those inhibitors have now been developed. Clearly, then, nerve repair will be a standard medical procedure in the foreseeable future. Which of the following, if true, casts the most serious doubt on the accuracy of the prediction above?

- A. Prevention of the regeneration of damaged nerves is merely a by-product of the main function in the human body of the substances inhibiting nerve growth.
- B. Certain nerve-growth stimulants have similar chemical structures to those of the antibodies against nerve-growth inhibitors.
- C. Nerves in the brain are similar to nerves in the spinal cord in their inability to regenerate themselves naturally.
- D. Researchers have been able to stimulate the growth of nerves not located in the spinal cord by using only nerve-growth stimulants.
- E. Deactivating the substances inhibiting nerve growth for an extended period would require a steady supply of antibodies.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 627

The human body secretes more pain-blocking hormones late at night than during the day. Consequently, surgical patients operated on at night need less anesthesia. Since larger amounts of anesthesia pose greater risks for patients, the risks of surgery could be reduced if operations routinely took place at night.

Which of the following, if true, argues most strongly against the view that surgical risks could be reduced by scheduling operations at night?

- A. Energy costs in hospitals are generally lower at night than they are during the day.
- B. More babies are born between midnight and seven o'clock in the morning than at any other time.
- C. Over the course of a year, people's biological rhythms shift slightly in response to changes in the amounts of daylight to which the people are

exposed.

- D. Nurses and medical technicians are generally paid more per hour when they work during the night than when they work during the day.
- E. Manual dexterity and mental alertness are lower in the late night than they are during the day, even in people accustomed to working at night.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 628

Walter: A copy of an artwork should be worth exactly what the original is worth if the two works are visually indistinguishable. After all, if the two works are visually indistinguishable, they have all the same qualities, and if they have all the same qualities, their prices should be equal. Marissa: How little you understand art! Even if someone could make a perfect copy that is visually indistinguishable from the original, the copy would have a different history and hence not have all the same qualities as the original.

Which of the following is a point at issue between Walter and Marissa?

- A. Whether a copy of an artwork could ever be visually indistinguishable from the original
- B. Whether the reproduction of a work of art is ever worth more than the original is worth
- C. Whether a copy of a work of art is ever mistaken for the original
- D. Whether a copy of a work of art could have all the same qualities as the original
- E. Whether originality is the only valuable attribute that a work of art can possess

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 629

Walter: A copy of an artwork should be worth exactly what the original is worth if the two works are visually indistinguishable. After all, if the two works are visually indistinguishable, they have all the same qualities, and if they have all the same qualities, their prices should be equal. Marissa: How little you understand art! Even if someone could make a perfect copy that is visually indistinguishable from the original, the copy would have a different history and hence not have all the same qualities as the original.

Marissa uses which of the following techniques in attempting to refute Walter's argument?

- A. Attacking his assumption that the price of an artwork indicates its worth
- B. Raising a point that would undermine one of the claims on which his conclusion is based

- C. Questioning his claim that a perfect copy of a work of art would be visually indistinguishable from the original
- D. Giving reason to believe that Walter is unable to judge the quality of a work of art because of his inadequate understanding of the history of art
- E. Proposing alternative criteria for determining whether two works of art are visually indistinguishable

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 630

Magnetic resonance imaging (MRI)--a noninvasive diagnostic procedure--can be used to identify blockages in the coronary arteries. In contrast to angiograms--the invasive procedure customarily used --MRI's pose no risk to patients. Thus, to guarantee patient safety in the attempt to diagnose arterial blockages, MRI's should replace angiograms in all attempts at diagnosing coronary blockages. Which of the following, if true, would most support the recommendation above?

- A. Angiograms can be used to diagnose conditions other than blockages in arteries.
- B. MRI's were designed primarily in order to diagnose blockages in the coronary arteries.
- C. Angiograms reveal more information about the nature of a blockage than an MRI can.
- D. An MRI is just as likely as an angiogram to identify an arterial blockage.
- E. Some patients for whom an angiogram presents no risk are unwilling to undergo an MRI.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 631

Naturally occurring chemicals cannot be newly patented once their structures have been published. Before a naturally occurring chemical compound can be used as a drug, however, it must be put through the same rigorous testing program as any synthetic compound, culminating in a published report detailing the chemical's structure and observed effects. If the statements above are true, which of the following must also be true on the basis of them?

- A. Any naturally occurring chemical can be reproduced synthetically once its structure is known.
- B. Synthetically produced chemical compounds cannot be patented unless their chemical structures are made public.
- C. If proven no less effective, naturally occurring chemicals are to be preferred to synthetic compounds for use in drugs.
- D. Once a naturally occurring compound has been approved for use as a drug, it can no longer be newly patented.
- E. A naturally occurring chemical cannot be patented unless its effectiveness as a drug has been rigorously established.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 632

A public-service advertisement advises that people who have consumed alcohol should not drive until they can do so safely. In a hospital study, however, subjects questioned immediately after they consumed alcohol underestimated the time necessary to regain their driving ability. This result indicates that many people who drink before driving will have difficulty following the advertisement's advice. Which of the following, if true, most strongly supports the argument above?

- A. Many people, if they plan to drink alcohol, make arrangements beforehand for a nondrinker to drive them home.
- B. The subjects in the hospital study generally rated their abilities more conservatively than would people drinking alcohol outside a hospital setting.
- C. Some people refrain from drinking if they will have to drive to get home afterward.
- D. The subjects in the hospital study were also questioned about the time necessary to regain abilities that do not play an important role in driving safely.
- E. Awareness of the public-service advertisement is higher among the general population than it was among the subjects in the hospital study.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 633

Investigator: XYZ Coins has misled its clients by promoting some coins as "extremely rare" when in fact those coins are relatively common and readily available. XYZ agent: That is ridiculous. XYZ Coins is one of the largest coin dealers in the world. We authenticate the coins we sell through a nationally recognized firm and operate a licensed coin dealership. The XYZ agent's reply is most vulnerable to the criticism that it

- A. exaggerates the investigator's claims in order to make them appear absurd
- B. accuses the investigator of bias but presents no evidence to support that accusation
- C. fails to establish that other coin dealers do not also authenticate the coins those dealers sell
- D. lists strengths of XYZ Coins while failing to address the investigator's charge
- E. provides no definition for the inherently vague phrase "extremely rare"

Correct Answer: D

Section: Critical Reasoning Questions**Explanation****Explanation/Reference:****QUESTION 634**

Both Writewell and Express provide round-the-clock telephone assistance to any customer who uses their word-processing software. Since customers only call the hot lines when they find the software difficult to use, and the Writewell hot line receives four times as many calls as the Express hot line, Writewell's word-processing software must be more difficult to use than Express's. Which of the following, if true, most strengthens the argument above?

- A. Calls to the Express hot line are almost twice as long, on average, as are calls to the Writewell hot line.
- B. Express has three times the number of word-processing software customers that Writewell has.
- C. Express receives twice as many letters of complaint about its word-processing software as Writewell receives about its word-processing software.
- D. The number of calls received by each of the two hot lines has been gradually increasing.
- E. The Writewell hot-line number is more widely publicized than the Express hot-line number.

Correct Answer: B

Section: Critical Reasoning Questions**Explanation****Explanation/Reference:****QUESTION 635**

Over the last century, paleontologists have used small differences between fossil specimens to classify triceratops into sixteen species. This classification is unjustified, however, since the specimens used to distinguish eleven of the species come from animals that lived in the same area at the same time. Which of the following, if true, would enable the conclusion of the argument to be properly drawn?

- A. Not every species that lived in a given area is preserved as a fossil.
- B. At least one individual of every true species of triceratops has been discovered as a fossil specimen.
- C. No geographical area ever supports more than three similar species at the same time.
- D. In many species, individuals display quite marked variation.
- E. Differences between fossil specimens of triceratops that came from the same area are no less distinctive than differences between specimens that came from different areas.

Correct Answer: C

Section: Critical Reasoning Questions**Explanation**

Explanation/Reference:

QUESTION 636

Many consumers are concerned about the ecological effects of wasteful packaging. This concern probably explains why stores have been quick to stock new cleaning products that have been produced in a concentrated form. The concentrated form is packaged in smaller containers that use less plastic and require less transportation space.

Which of the following, if true, most seriously undermines the explanation offered above?

- A. Few consumers believe that containers of concentrated cleaning products are merely small packages of regular cleaning products.
- B. The containers in which concentrated cleaning products are packaged are no harder to recycle than those in which regular cleaning products are packaged.
- C. Those concentrated cleaning products that are intended to be used diluted have clear instructions for dilution printed on their labels.
- D. The smaller containers of concentrated cleaning products enable supermarkets and drugstores to increase their revenues from a given shelf space.
- E. Consumer pressure has led to the elimination of wasteful cardboard packaging that was used for compact discs.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 637

In the first half of this year, from January to June, about three million videocassette recorders were sold. This number is only 35 percent of the total number of videocassette recorders sold last year. Therefore, total sales of videocassette recorders will almost certainly be lower for this year than they were for last year.

Which of the following, if true, most seriously weakens the conclusion above?

- A. The total number of videocassette recorders sold last year was lower than the total number sold in the year before that.
- B. Most people who are interested in owning a videocassette recorder have already purchased one.
- C. Videocassette recorders are less expensive this year than they were last year.
- D. Of the videocassette recorders sold last year, almost 60 percent were sold in January.
- E. Typically, over 70 percent of the sales of videocassette recorders made in a year occur in the months of November and December.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 638

Mud from a lake on an uninhabited wooded island in northern Lake Superior contains toxic chemicals, including toxaphene, a banned pesticide for cotton that previously was manufactured and used, not in nearby regions of Canada or the northern United States, but in the southern United States. No dumping has occurred on the island. The island lake is sufficiently elevated that water from Lake Superior does not reach it.

The statements above, if true, most strongly support which of the following hypotheses?

- A. The waters of the island lake are more severely polluted than those of Lake Superior.
- B. The toxaphene was carried to the island in the atmosphere by winds.
- C. Banning chemicals such as toxaphene does not aid the natural environment.
- D. Toxaphene has adverse effects on human beings but not on other organisms.
- E. Concentrations of toxaphene in the soil of cotton-growing regions are not sufficient to be measurable.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 639

Last year in the United States, women who ran for state and national offices were about as likely to win as men. However, only about fifteen percent of the candidates for these offices were women. Therefore, the reason there are so few women who win elections for these offices is not that women have difficulty winning elections but that so few women want to run. Which of the following, if true, most seriously undermines the conclusion given?

- A. Last year the proportion of women incumbents who won reelection was smaller than the proportion of men incumbents who won reelection.
- B. Few women who run for state and national offices run against other women.
- C. Most women who have no strong desire to be politicians never run for state and national offices.
- D. The proportion of people holding local offices who are women is smaller than the proportion of people holding state and national offices who are women.
- E. Many more women than men who want to run for state and national offices do not because they cannot get adequate funding for their campaigns.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 640

Samples from a ceramic vase found at a tomb in Sicily prove that the vase was manufactured in Greece. Since the occupant of the tomb died during the

reign of a Sicilian ruler who lived 2,700 years ago, the location of the vase indicates that there was trade between Sicily and Greece 2,700 years ago. Which of the following is an assumption on which the argument depends?

- A. Sicilian potters who lived during the reign of the ruler did not produce work of the same level of quality as did Greek potters.
- B. Sicilian clay that was used in the manufacture of pottery during the ruler's reign bore little resemblance to Greek clay used to manufacture pottery at that time.
- C. At the time that the occupant of the tomb was alive, there were ships capable of transporting large quantities of manufactured goods between Sicily and Greece.
- D. The vase that was found at the Sicilian tomb was not placed there many generations later by descendants of the occupant of the tomb.
- E. The occupant of the tomb was not a member of the royal family to which the Sicilian ruler belonged.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 641

In several cities, the government is going ahead with ambitious construction projects despite the high office vacancy rates in those cities. The vacant offices, though available for leasing, unfortunately do not meet the requirements for the facilities needed, such as court houses and laboratories. The government, therefore, is not guilty of any fiscal wastefulness. Which of the following is an assumption on which the argument above depends?

- A. Adaptation of vacant office space to meet the government's requirements, if possible, would not make leasing such office space a more cost-effective alternative to new construction.
- B. The government prefers leasing facilities to owning them in cases where the two alternatives are equally cost-effective.
- C. If facilities available for leasing come very close to meeting the government's requirements for facilities the government needs, the government can relax its own requirements slightly and consider those facilities in compliance.
- D. The government's construction projects would not on being completed, add to the stock of facilities available for leasing in the cities concerned.
- E. Before embarking on any major construction project, the government is required by law to establish beyond any reasonable doubt that there are no alternatives that are most cost-effective.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 642

Potato cyst nematodes are a pest of potato crops. The nematodes can lie dormant for several years in their cysts, which are protective capsules, and do

not emerge except in the presence of chemicals emitted by potato roots. A company that has identified the relevant chemicals is planning to market them to potato farmers to spread on their fields when no potatoes are planted; any nematodes that emerge will soon starve to death. Which of the following, if true, best supports the claim that the company's plan will be successful?

- A. Nematodes that have emerged from their cysts can be killed by ordinary pesticides.
- B. The only part of a potato plant that a nematode eats is the roots.
- C. Some bacteria commonly present in the roots of potatoes digest the chemicals that cause the nematodes to emerge from their cysts.
- D. Trials have shown that spreading even minute quantities of the chemicals on potato fields caused nine-tenths of the nematodes present to emerge from their cysts.
- E. The chemicals that cause the nematodes to emerge from their cysts are not emitted all the time the potato plant is growing.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 643

It is better for the environment if as much of all packaging as possible is made from materials that are biodegradable in landfills. Therefore, it is always a change for the worse to replace packaging made from paper or cardboard with packaging made from plastics that are not biodegradable in landfills. Which of the following, if true, constitutes the strongest objection to the argument above?

- A. The paper and cardboard used in packaging are usually not biodegradable in landfills.
- B. Some plastic used in packaging is biodegradable in landfills.
- C. In many landfills, a significant proportion of space is taken up by materials other than discarded packaging materials.
- D. It is impossible to avoid entirely the use of packaging materials that are not biodegradable in landfills.
- E. Sometimes, in packaging an item, plastics that are not biodegradable in landfills are combined with cardboard.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 644

Any serious policy discussion about acceptable levels of risk in connection with explosions is not well served if the participants fail to use the word "explosion" and use the phrase "energetic disassembly" instead. In fact, the word "explosion" elicits desirable reactions, such as a heightened level of attention, whereas the substitute phrase does not. Therefore, of the two terms, "explosion" is the one that should be used throughout discussions of this sort.

Which of the following is an assumption on which the argument above depends?

- A. In the kind of discussion at issue, the advantages of desirable reactions to the term "explosion" outweigh the drawbacks, if any, arising from undesirable reactions to that term.
- B. The phrase "energetic disassembly" has not so far been used as a substitute for the word "explosion" in the kind of discussion at issue.
- C. In any serious policy discussion, what is said by the participants is more important than how it is put into words.
- D. The only reason that people would have for using "energetic disassembly" in place of "explosion" is to render impossible any serious policy discussion concerning explosions.
- E. The phrase "energetic disassembly" is not necessarily out of place in describing a controlled rather than an accidental explosion.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 645

Mannis Corporation's archival records are stored in an obsolete format that is accessible only by its current computer system; thus they are inaccessible when that system is not functioning properly. In order to avoid the possibility of losing access to their archival records in the case of computer malfunction, Mannis plans to replace its current computer system with a new system that stores records in a format that is accessible to several different systems. The answer to which of the following questions would be most helpful in evaluating the effectiveness of the plan as a means of retaining access to the archival records?

- A. Will the new computer system require fewer operators than the current system requires?
- B. Has Mannis Corporation always stored its archival records in a computerized format?
- C. Will the new computer system that Mannis plans ensure greater security for the records stored than does Mannis' current system?
- D. Will Mannis' current collection of archival records be readily transferable to the new computer system?
- E. Will the new computer system be able to perform many more tasks than the current system is able to perform?

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 646

Last year the worldwide paper industry used over twice as much fresh pulp (pulp made directly from raw plant fibers) as recycled pulp (pulp made from wastepaper). A paper-industry analyst has projected that by 2010 the industry will use at least as much recycled pulp annually as it does fresh pulp, while using a greater quantity of fresh pulp than it did last year. If the information above is correct and the analyst's projections prove to be accurate,

which of the following projections must also be accurate?

- A. In 2010 the paper industry will use at least twice as much recycled pulp as it did last years.
- B. In 2010 the paper industry will use at least twice as much total pulp as it did last year.
- C. In 2010 the paper industry will produce more paper from a given amount of pulp than it did last year.
- D. As compared with last year, in 2010 the paper industry will make more paper that contains only recycled pulp.
- E. As compared with last year, in 2010 the paper industry will make less paper that contains only fresh pulp.

Correct Answer: A

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 647

In malaria-infested areas, many children tend to suffer several bouts of malaria before becoming immune to the disease. Clearly, what must be happening is that those children's immune systems are only weakly stimulated by any single exposure to the malaria parasite and need to be challenged several times to produce an effective immune response.

Which of the following, if true, most seriously undermines the explanatory hypothesis?

- A. Immediately after a child has suffered a bout of malaria, the child's caregivers tend to go to great lengths in taking precautions to prevent another infection, but this level of attention is not sustained.
- B. Malaria is spread from person to person by mosquitoes, and mosquitoes have become increasingly resistant to the pesticides used to control them.
- C. A certain gene, if inherited by children from only one of their parents, can render those children largely immune to infection with malaria.
- D. Anti malariavaccines, of which several are in development, are all designed to work by stimulating the body's immune system.
- E. There are several distinct strains of malaria, and the body's immune response to any one of them does not protect it against the others.

Correct Answer: E

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 648

An advertisement designed to convince readers of the great durability of automobiles manufactured by the Deluxe Motor Car Company cites as evidence the fact that over half of all automobiles built by the company since 1970 are still on the road today, compared to no more than a third for any other manufacturer.

Which of the following, if true, most strongly supports the advertisement's argument?

- A. After taking inflation into account, a new Deluxe automobile costs only slightly more than a new model did in 1970.
- B. The number of automobiles built by Deluxe each year has not increased sharply since 1970.
- C. Owners of Deluxe automobiles typically keep their cars well maintained.
- D. Since 1970, Deluxe has made fewer changes in the automobiles it manufactures than other car companies have made in their automobiles.
- E. Deluxe automobiles have been selling at relatively stable prices in recent years.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 649

Many state legislatures are considering proposals to the effect that certain policies should be determined not by the legislature itself but by public referenda in which every voter can take part. Critics of the proposals argue that the outcomes of public referenda would be biased, since wealthy special-interest groups are able to influence voters' views by means of television advertisements. Which of the following, if true, most strengthens the critics' argument?

- A. Many state legislators regard public referenda as a way of avoiding voting on issues on which their constituents are divided.
- B. During elections for members of the legislature, the number of people who vote is unaffected by whether the candidates run television advertisements or not.
- C. Proponents of policies that are opposed by wealthy special-interest groups are often unable to afford advertising time on local television stations.
- D. Different special-interest groups often take opposing positions on questions of which policies the state should adopt.
- E. Television stations are reluctant to become associated with any one political opinion, for fear of losing viewers who do not share that opinion.

Correct Answer: C

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 650

Advertisement: Of the many over-the-counter medications marketed for the relief of sinus headache. Sine Ease costs the least per dose. And Sine Ease is as effective per dose as the most effective of those other medications. So for relief from sinus headaches, Sine Ease is the best buy. Which of the following, if true, most seriously weakens the argument above?

- A. Most of the over-the-counter medications marketed for the relief of sinus headache are equally effective per dose in providing such relief.
- B. Many of the over-the-counter medications marketed for the relief of sinus headache contain the same active ingredient as Sine Ease.

- C. People who suffer from frequent sinus headaches are strongly advised to consult a doctor before taking any over-the-counter medication.
- D. An over-the-counter medication that is marketed for the relief of symptoms of head cold is identical in composition to Sine Ease but costs less per dose.
- E. The per dose price for any given over-the-counter medication marketed for the relief of sinus headache is higher for smaller packages than it is for larger packages.

Correct Answer: D

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 651

In the United States, vacationers account for more than half of all visitors to what are technically called "pure aquariums" but for fewer than one quarter of all visitors to zoos, which usually include a "zoo aquarium" of relatively modest scope.

Which of the following, if true, most helps to account for the difference described above between visitors to zoos and visitors to pure aquariums?

- A. In cities that have both a zoo and a pure aquarium, local residents are twice as likely to visit the aquarium as they are to visit the zoo.
- B. Virtually all large metropolitan areas have zoos, whereas only a few large metropolitan areas have pure aquariums.
- C. Over the last ten years, newly constructed pure aquariums have outnumbered newly established zoos by a factor of two to one.
- D. People who visit a zoo in a given year are two times more likely to visit a pure aquarium that year than are people who do not visit a zoo.
- E. The zoo aquariums of zoos that are in the same city as a pure aquarium tend to be smaller than the aquariums of zoos that have no pure aquarium nearby.

Correct Answer: B

Section: Critical Reasoning Questions

Explanation

Explanation/Reference:

QUESTION 652

Despite growing evidence of global warming; 34 different states plan to develop nearly 100 new coal burning electric plants in the next decade.

- A. warming; 34 different states
- B. warming; Thirty-four different states
- C. warming; 34 different states
- D. warming, 34 different statesE warming, for 34 different states

Correct Answer: D

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

Despite growing evidence of global warming is a dependent clause that should be followed by a comma when preceding an independent clause (34 different states . . .). Choice a is incorrect because a semi-colon should not be used between a dependent and independent clause. Choice b creates a sentence fragment because the dependent clause is set off as a separate sentence. Choice c incorrectly uses a colon, which should only be used to introduce lists, quotations, or explanations. Choice e creates an illogical sentence that uses both despite and for, confusing the relationship between the two clauses.

QUESTION 653

Suggested by new research is the fact that people who achieve phenomenal success do so, not only by visualizing their success in future endeavors, but also, by recalling their past successes, creating a tremendous surge in confidence.

- A. Suggested by new research is the fact that people who achieve phenomenal success do so, not only by visualizing their success in future endeavors, but also, by recalling their past successes, creating a tremendous surge in confidence.
- B. New research suggests that people that achieve phenomenal success visualize their success in future endeavors and also recall their past successes to create a tremendous surge in confidence.
- C. New research suggests that the achievement of phenomenal success by persons is accomplished not only by the visualization of success in future endeavors but also by the recollection of past successes, which creates a tremendous surge in confidence.
- D. New research suggests that people who achieve phenomenal success do so not only by visualizing their success in future endeavors but also by recalling their past successes, creating a tremendous surge in confidence.
- E. New research suggests that people who achieve phenomenal success do so not only by visualizing their success in future endeavors, but also they recall their past successes, creating a tremendous surge in confidence.

Correct Answer: D

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

This version states the idea clearly, correctly, and concisely, using parallel structure. Choice a is bulky and awkward with its opening phrase suggested by new research is the fact that; it also has several superfluous commas. Choice b incorrectly uses that instead of who to refer to people, and while it is not wordy, it is not as fluent as choice d. Choice c is wordy, relying on bulky passive constructions and prepositional phrases. Choice e is incorrect because it lacks parallel structure.

QUESTION 654

Creating a fundamental shift in American foreign policy and establishing a "policy of containment" that framed our foreign policy as a battle between the

forces of good (America and other democratic societies) and evil (the Soviet Union and other communist nations), was the 1947 Truman Doctrine.

- A. Creating a fundamental shift in American foreign policy and establishing a "policy of containment" that framed our foreign policy as a battle between the forces of good (America and other democratic societies) and evil (the Soviet Union and other communist nations), was the 1947 Truman Doctrine.
- B. The 1947 Truman Doctrine created a fundamental shift in American foreign policy, establishing a "policy of containment" that framed our foreign policy as a battle between the forces of good (America and other democratic societies) and evil (the Soviet Union and other communist nations).
- C. Creating a fundamental shift in American foreign policy was the Truman Doctrine, which was put forth in 1947, and which established a "policy of containment" that framed our foreign policy as a battle between the forces of good (America, along with other democratic societies) and the forces of evil (the Soviet Union, along with other communist nations).
- D. The 1947 Truman Doctrine created a fundamental shift in American foreign policy, establishing a "policy of containment" that framed our foreign policy as a battle between American and other democratic societies, which it considered the forces of good, and the Soviet Union and other communist nations, which it considered the forces of evil.
- E. A fundamental shift in American foreign policy was created in 1947 by the Truman Doctrine, which importantly established a "policy of containment," a policy that framed our foreign policy in terms of a battle between good and evil, with the good forces being America and other democracies and the evil forces being the Soviet Union and other communist nations.

Correct Answer: B

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

This version is the most active and direct, starting with the agent of action (the Truman Doctrine) and clearly and concisely stating the effects of the doctrine. Choices a and c awkwardly put the action before the subject, and choice c also breaks up the two actions, interrupting the fluency of the sentence. Choice d uses two bulky which clauses, rather than the more concise parenthetical phrases of choice b. Choice e begins with a passive construction and is both wordy and redundant.

QUESTION 655

The first science-fiction novel, Mary Shelley's *Frankenstein*, actually contains very little science, but it masterfully explores the social and moral repercussions of what might happen if certain scientific advances were possible.

- A. but it masterfully explores the social and moral repercussions of what might happen
- B. but it explores in a masterful way the social and moral repercussions of what might happen
- C. but, exploring the social and moral repercussions, it masterfully considers what might happen
- D. but it masterfully explores repercussions, social and moral in nature, of what might happen
- E. but it masterfully explores what are the social and moral repercussions

Correct Answer: A

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

This is the most concise, precise, and correct choice. Choice b is wordy, using the phrase in a masterful way instead of masterfully. Choice c uses awkward word order that requires the addition of a verb (considers) because explores is moved to before the subject. Choice d is wordy as the result of moving social and moral from their position directly before the noun they modify. Choice e awkwardly places what are after explores and deletes the important idea of possibility conveyed by of what might happen.

QUESTION 656

The most important issue relating to computer technology and the Internet is the right of individual privacy, this includes the privacy of our personal data and our actions in cyberspace.

- A. Internet is the right of individual privacy, this includes the privacy
- B. Internet is the right of individual privacy, being the privacy
- C. Internet is the right of individual privacy, including the privacy
- D. Internet is the right of individuals to have privacy, and included in this consideration is the privacy
- E. Internet is an individual's right to privacy. Including the privacy

Correct Answer: C

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

Choice a is a run-on sentence and is therefore incorrect. Choice b uses being in an awkward and grammatically incorrect manner. Choice d is unnecessarily wordy, and choice e replaces the comma with a period and creates a sentence fragment.

QUESTION 657

While diabetes does not interfere with digestion, on the other hand, it does prevent the body from converting an important product of digestion, glucose, which is commonly known as sugar, into energy.

- A. While diabetes does not interfere with digestion, on the other hand, it does prevent the body from converting an important product of digestion, glucose, which is commonly known as sugar, into energy.
- B. Diabetes does not interfere with digestion, but it does prevent the body from using glucose, which is commonly known as sugar, which is a product of digestion and which is converted into energy.
- C. Commonly known as sugar, glucose is an important product of digestion, which is prevented from being converted by the body into energy by diabetes, although diabetes does not interfere with digestion.
- D. Diabetes does not interfere with digestion, but it does prevent the body from converting an important product of digestion, glucose (commonly known

as sugar), into energy.

- E. Diabetes does not interfere with digestion, but glucose (commonly known as sugar) is an important product of digestion and is unable to be converted into energy by the body because of the disease.

Correct Answer: D

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

This is the most concise and fluent version. Choice a incorrectly uses the transitional phrase on the other hand, and because it puts which is commonly known as sugar into a nonrestrictive clause immediately after the appositive glucose, the sentence may be confusing. Choice b is grammatically correct but quite awkward, using which three times in one sentence. Choice c inverts the sentence, making it less direct and therefore less clear. Choice e is correct but less direct and slightly more wordy than d because it uses the passive construction (converted by the body).

QUESTION 658

With an increasing amount of vegetarians, more stores are beginning to stock their shelves with standard vegetarian fare, such as soy milk and tofu.

- A. With an increasing amount of vegetarians
- B. With the number of vegetarians on the rise
- C. With the number of vegetarians, which is on the rise?
- D. Increasingly, there are more and more vegetarians, so
- E. Increasing in number are vegetarians, so

Correct Answer: B

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

Choice b presents the most concise and fluent version. Choice a incorrectly uses amount instead of number. Choice c is unnecessarily wordy, using the nonrestrictive phrase which is on the rise instead of on the rise. Choice d is also unnecessarily wordy and less direct. Choice e is awkward, with an inverted word order.

QUESTION 659

Presumed to be genetic or partially genetic in origin, about three in every 100 children are born with a severe disorder.

- A. Presumed to be genetic or partially genetic in origin, about three in every 100 children are born with a severe disorder.
- B. Born with a severe disorder presumed to be genetic or partially genetic in origin, are about three in every 100 children.
- C. About three in every 100 children are born with a severe disorder presumed to be genetic or partially genetic in origin.

- D. About three in every 100 children, presumed to be genetic or partially genetic in origin, are born with a severe disorder.
- E. Severe disorders that are presumed to be genetic or partially genetic in origin are found in about three in every 100 children who are born.

Correct Answer: C

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

Choices a, b, and d have problems with word order. In choices a and d, the modifier presumed to be genetic or partially genetic in origin is misplaced. In b, the subject and predicate are reversed. Choice e is unnecessarily wordy and redundant.

QUESTION 660

By using tiny probes as neural prostheses, surgeons may be able to restore nerve function in quadriplegics and make the blind see or the deaf hear.

- A. By using tiny probes as neural prostheses,
- B. Through the use of tiny probes used as neural prostheses,
- C. By using tiny probes, which will function as neural prostheses?
- D. As neural prostheses, and by using tiny probes,
- E. Since the use of tiny probes as neural prostheses,

Correct Answer: A

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The original is the most clear and correct version. Choices b and c are unnecessarily wordy, and c also creates a sentence fragment with the semicolon. Choice d is awkward and unclear, and the use of since in choice e is illogical.

QUESTION 661

The situation is too serious to guess hazardously, we need more data to draw a real conclusion.

- A. to guess hazardously, we need
- B. to hazard a guess; we need
- C. to be hazardous with a guess; we need
- D. to hazard guessing, we need
- E. for guessing hazardously; we need

Correct Answer: B

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The correct idiom is hazard a guess. All of the other choices incorrectly express the idiom. In addition, the idiom completes an independent clause, and we need more data to draw a real conclusion is also an independent clause; they cannot be separated with a comma, so choices a and d are also incorrect.

QUESTION 662

Medical waste is generally collected by gravity chutes, carts, or pneumatic tubes, each of which have their own advantages and disadvantages.

- A. Medical waste is generally collected by gravity chutes, carts, or pneumatic tubes, each of which have heir own advantages and disadvantages.
- B. Collected by gravity chutes, carts, or pneumatic tubes, each of which has its own advantages and disadvantages, is medical waste.
- C. Medical waste is generally collected by gravity chutes, carts, or pneumatic tubes are also used, each of which has its own advantages and disadvantages.
- D. Medical waste is generally collected by gravity chutes, carts, or pneumatic tubes, each of which has its own advantages and disadvantages.
- E. There are advantages and disadvantages for each means of collection of medical waste, including gravity chutes, carts, and pneumatic tubes.

Correct Answer: D

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

This choice is nearly identical to a, except that choice a makes a mistake in subject-verb agreement (have instead of has, which must be singular to agree with each). Choice b reverses the subject and predicate, creating awkward word order. Choice c disrupts the parallel structure of the list, and choice e is slightly wordy and less direct than choice d.

QUESTION 663

Because the Dvorak keyboard puts vowels and other frequently used letters right under the fingers on home row, where typists make 70% of their keystrokes, people can type 20% to 30% faster and make 50% less errors.

- A. people can type 20% to 30% faster and make 50% less errors.
- B. people can type making 50% less errors and 20% to 30% faster.
- C. people can type 20% to 30% faster and make 50% fewer errors.
- D. people can type faster (20% to 30%), making errors less than 50% of the time.

E. people can type 20% to 30% faster while making 50% errors less.

Correct Answer: C

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

Errors is a plural noun, so it should be modified by fewer, not less. Thus, choices a, b, and e are incorrect. Choice e also reverses the word order, placing the modifier less after the noun. Choice d is incorrect because it is less concise than choice c and the placement of 20% to 30% in parenthesis is slightly awkward and less direct than in choice c.

QUESTION 664

In order for us within our society to be able to make decisions about the kinds of punishments we impose upon those criminals who are convicted of crimes, we must first understand why we punish criminals.

- A. In order for us within our society to be able to make decisions about the kinds of punishments we impose upon those criminals who are convicted of crimes, we must first understand why we punish criminals.
- B. To make decisions about the kinds of punishments we impose upon criminals, we must first understand why we punish criminals.
- C. In order for us to be able to decide about the kinds of punishments we impose upon people convicted of crimes, we must first understand why people should be punished.
- D. Beginning with understanding why we punish, we can then as a society make decisions about the kinds of punishments we impose upon criminals.
- E. Deciding upon the kinds of punishments we impose upon criminals, as a society, we must first understand why punishment is imposed upon criminals.

Correct Answer: B

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

Choices a, c, and d are wordy and redundant, with a being the most problematic. Choice e changes to make decisions into deciding, creating an awkward sentence because the sentence opens with a participle rather than an infinitive clause, suggesting action already in progress rather than action that will be taken once reasons for punishment are understood.

QUESTION 665

Known as the Australian Eleanor Roosevelt, Jessie Street lived a life in privilege while at the same time devoting her efforts to working for the rights of the disenfranchised, including workers, women, refugees, and Aborigines.

- A. lived a life in privilege while at the same time devoting
- B. lived a life of privilege while simultaneously she devoted
- C. lived a life of privilege while devoting
- D. lived a life in privilege and devoting at the same time
- E. lived a life of privilege and wealth while at the same time devoted

Correct Answer: C

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The correct idiom is to live a life of privilege, so choices a and d are incorrect. Choice b is wordy (simultaneously repeats while and she is repeated unnecessarily), as is choice e (wealth is redundant with life of privilege).

QUESTION 666

The main reason for the decline in worldwide illiteracy rates, which have dropped over the last 20 years, is the sharp increase of literacy rates among young women, which is the result of campaigns to increase educational opportunities for girls.

- A. The main reason for the decline in worldwide illiteracy rates, which have dropped over the last 20 years,
- B. Declining over the last 20 years, worldwide illiteracy rates have fallen for one main reason, which
- C. Declining over the last 20 years, the main reason for the fall in illiteracy rates
- D. The main reason worldwide illiteracy rates, having dropped over the last 20 years,
- E. The main reason for the decline in worldwide illiteracy rates over the last 20 years

Correct Answer: E

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

This is the most correct and concise version. Choices a, b, and d are less concise, and d creates an illogical sentence by changing have to having. Choice c is incorrect because declining over the last 20 years is misplaced and as a result modifies main reason.

QUESTION 667

Probably as old as human society, and defined as "the willful, malicious, and repeated following and harassing of another person," is stalking.

- A. Probably as old as human society, and defined as "the willful, malicious, and repeated following and harassing of another person," is stalking.

- B. Stalking is probably as old as human society and is defined as "the willful, malicious, and repeated following and harassing of another person."
- C. Probably as old as human society, the definition of stalking is "the willful, malicious, and repeated following and harassing of another person."
- D. "The willful, malicious, and repeated following and harassing of another person" is the definition of stalking, which is probably as old as human society.
- E. Probably as old as human society, stalking is defined as "the willful, malicious, and repeated following and harassing of another person."

Correct Answer: E

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

Choice a reverses the subject and predicate. Choice b is correct but is less effective than choice e because it sets up the two items of information as equal--that stalking is probably as old as human society and its definition. Choice e uses probably as old as human society as an introduction to the focus of the sentence--the definition of stalking. Choice e is also more direct and does not need to repeat the verb is. Choice c uses the phrase the definition of stalking is rather than the more direct stalking is defined as. Choice d puts the definition before the word being defined, which is less effective, making readers wait until they have finished the definition to find out what is being defined.

QUESTION 668

Typically people think of genius, whether it manifests itself in Mozart composing symphonies at age five or Einstein's discovery of relativity, as having a quality not just of the supernatural but also they are eccentric.

- A. as having a quality not just of the supernatural but also they are eccentric.
- B. as having two qualities, being that they are both supernatural as well as eccentric
- C. as having a quality not just of the supernatural but also of the eccentric
- D. as having a quality not just of the supernatural but also another quality, that is, eccentricity
- E. as it has two qualities, not only supernatural but as well eccentric

Correct Answer: C

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

This choice maintains the parallel structure necessary in a not only/but also construction. Choices a and d disrupt the parallel structure, and d is also wordy. Choice b uses the grammatically incorrect phrase being that. Choice e has two problems. First, it creates an illogical sentence by changing as having to as it has. If you eliminate the whether clause in the middle of the sentence, the core sentence would read Typically people think of genius as it has two qualities, not only supernatural but as well eccentric. Second, it changes not only/but also to not only/but as well an incorrect idiom

QUESTION 669

The financial hub of a business management information system (MIS) is accounting, the system of recording, analyzing, and reporting economic transactions.

- A. The financial hub of a business management information system (MIS) is accounting, the system of recording, analyzing, and reporting economic transactions.
- B. The financial hub of a business management information system (MIS) is accounting, it is the system of recording, analyzing, and reporting economic transactions.
- C. The financial hub of a business management information system (MIS), which is accounting, is the system of recording, analyzing, and used to report economic transactions.
- D. A system of recording, analyzing, and reporting economic transactions, the financial hub of a business management information system (MIS) is accounting.
- E. A system of accounting is a business management information system (MIS)'s financial hub, in that it is used to record, analyze, and report economic transactions.

Correct Answer: A

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

Choice b is a run-on sentence. Choice c inserts an unnecessary which clause, making the sentence unnecessarily wordy. Choice d misplaces the modifier a system of recording, analyzing, and reporting economic transactions, which should be as close as possible to accounting. Choice e has awkward word order and the indirect and bulky phrase in that it is.

QUESTION 670

The poet William Blake believed that true religion reveals through art, not through nature.

- A. reveals through
- B. is revealed through
- C. reveals in
- D. is revealed by
- E. reveals

Correct Answer: B

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

Choices a, c, and e are incorrect because the helping verb is is required to make the sentence logical. Choice e is also missing the preposition through, which is necessary for the correct meaning as suggested by the context of the sentence. Choice d uses the preposition by instead of through, which is inconsistent with the final phrase and also less correct as suggested by the context of the sentence.

QUESTION 671

Although they are not considered the most highest evolved of the cephalopods, cuttlefish are extremely intelligent.

- A. the most highest evolved
- B. the more higher evolved
- C. the most highly evolving
- D. the most highly evolved
- E. the most evolutionarily high

Correct Answer: D

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

Choice a uses a double superlative, combining most and a modifier with -est. Choice b uses a double comparison as well, using more and a modifier with -er. Choice c incorrectly uses evolving instead of evolved, changing a modifier to a verb and making the sentence illogical. Choice e makes evolutionarily an adverb, which creates an awkward and unclear sentence.

QUESTION 672

Athletes who suffer from asthma need to work in the conjunction of a doctor who understands the disease and can design a proper training regimen.

- A. to work in the conjunction of a doctor who
- B. to work in conjunction with a doctor that
- C. to work in conjunction with a doctor who
- D. to work in conjunction of a doctor that
- E. to work at the conjunction of a doctor who

Correct Answer: C

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The proper idiom is in conjunction with. Choices a and e are therefore incorrect. Choices b and d are incorrect because the pronoun who, not that, must be used to refer to doctor.

QUESTION 673

Although on the one hand it is true that the lack of computer-related skills accounts for and explains many of the problems in today's job market, there is meanwhile a lack of skilled labor in many different fields.

- A. Although on the one hand it is true that the lack of computer-related skills accounts for and explains many of the problems in today's job market, there is meanwhile a lack of skilled labor in many different fields.
- B. While the lack of computer-related skills accounts for many of the problems in today's job market, the lack of skilled labor is evident in many different fields.
- C. A lack of skilled labor affects all fields, not just computer-related, the problems in today's job market shows.
- D. While the lack of computer-related skills accounts for many of the problems in today's job market, many different fields are also experiencing a shortage of skilled labor.
- E. Lacking computer-related skills, today's job market has many problems, and other fields also lack skilled labor.

Correct Answer: D

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

Choice a is wordy and redundant. Choice b is correct, but it is less effective than choice d because the word choice and sentence structure are less sophisticated. Choice c has an error in subject-verb agreement (problems . . . shows) and has awkward word order. Choice e has a misplaced modifier; because of its placement, lacking computer-related skills modifies today's job market.

QUESTION 674

Like Carl Jung, Joseph Campbell believed that the archetypal story of the hero who ventures from the safety of his village, endures many trials and triumphs, and returns with knowledge or goods that will save or enlighten his people, is part of the collective unconscious of all humankind.

- A. enlighten his people, is part of
- B. enlighten his people; is part of
- C. enlighten his people, are part of
- D. enlighten his people, who are part of
- E. enlighten his people, being in part

Correct Answer: A

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

This is a complicated sentence, and many phrases and clauses separate the subject story from the verb is (this subject-verb pair is not the main subject of the sentence but the subject and verb in the clause describing what Jung and Campbell believed). Because story is the subject, choice c is incorrect; the verb must be singular. Choices d and e are incorrect because they do not provide a verb to complete the clause; rather, they create an additional clause or phrase. Choice b creates a sentence fragment by inserting a semicolon after people.

QUESTION 675

The Competitive Civil Service system is designed to give applicants fair and equal treatment and to ensure that federal applicants are hired based in objective criteria.

- A. are hired based in
- B. are hired on
- C. are hired based on
- D. are hired based by
- E. are hired through employment of

Correct Answer: C

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The correct idiom is based on, so all other choices are incorrect.

QUESTION 676

Often attractive and charming, and always inordinately self-confident, people which suffer from antisocial personality disorder demonstrate a disturbing emotional shallowness.

- A. people which suffer from
- B. people are suffering from
- C. people that suffer from
- D. people who suffer from
- E. people suffer from

Correct Answer: D

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The pronoun who should be used to refer to people. Choices a and c are therefore incorrect. The clause who suffers from antisocial personality disorder is necessary to describe which people demonstrate a disturbing emotional shallowness. Choices b and e do not use a pronoun to create such a clause, making the sentence unclear and/or illogical.

QUESTION 677

Brought on by weightlessness in protracted space flight, besides the obvious hazards of meteors, rocky debris, and radiation, astronauts also have to deal with muscle atrophy.

- A. Brought on by weightlessness in protracted space flight, besides the obvious hazards of meteors, rocky debris, and radiation, astronauts also have to deal with muscle atrophy.
- B. Besides the obvious hazards of meteors, rocky debris, and radiation in protracted space flight, astronauts also have to deal with muscle atrophy, which is brought on by weightlessness.
- C. In protracted space flight, besides the obvious hazards of meteors, rocky debris, and radiation, astronauts also have to deal with muscle atrophy brought about through weightlessness.
- D. Besides the obvious hazards of protracted space flight, which include meteors, rocky debris, and radiation, astronauts also have to deal with another problem, which is the muscle atrophy that occurs after an extended period of weightlessness.
- E. Besides the obvious hazards of meteors, rocky debris, and radiation, astronauts in protracted space flight also have to deal with muscle atrophy brought on by weightlessness.

Correct Answer: E

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

Choices a, b, and c misplace the modifier in protracted space flight, which should follow astronauts, and a also misplaces brought on by weightlessness, which should follow atrophy. Choice c also makes an error in the idiom brought on by. Choice d is wordy.

QUESTION 678

The atmosphere forms a gaseous envelope around the earth, protecting it from the cold of space, harmful ultraviolet light, and meteors that are large, but not the largest.

- A. and meteors that are large, but not the largest
- B. and all but the largest meteors
- C. and most meteors, except those that are very large
- D. and large meteors, excepting the largest
- E. and with the exception of the largest, meteors

Correct Answer: B

Section: Sentence Correction Questions**Explanation****Explanation/Reference:**

Explanation:

All of the other choices are unnecessarily wordy and/or less direct. Choices a and e also disrupt the parallel structure of the list. Choice e is also awkward.

QUESTION 679

They were in mind, of a like manner about how to handle Carson's breach of contract.

- A. in mind, of a like manner
- B. likened of mind
- C. in a likened mind
- D. of a like-mindedness
- E. of a like mind

Correct Answer: E

Section: Sentence Correction Questions**Explanation****Explanation/Reference:**

Explanation:

The correct idiom is of a like mind. All other choices are therefore incorrect.

QUESTION 680

Ralph Waldo Emerson, the renowned poet, essayist, and transcendentalist, believed that the universe is a transcendent "over-soul" and that every living thing is a part of this "blessed Unity."

- A. the renowned poet, essayist, and transcendentalist
- B. the poet, essayist, and transcendentalist who was renowned
- C. the renowned poet as well as an essayist, who was also a transcendentalist
- D. who was a renowned poet and was also an essayist and transcendentalist
- E. being renowned as a poet, essayist, and transcendentalist

Correct Answer: A

Section: Sentence Correction Questions**Explanation****Explanation/Reference:**

Explanation:

This is the most concise version. Choice b disrupts the parallel structure by turning the modifier renowned into a clause. Choices c and d are wordy. Choice e incorrectly uses being to create an awkward sentence.

QUESTION 681

Recombinant DNA technology allows scientists to cut segments of DNA from one type of organism and combine them with the genes of a second organism, also called genetic engineering.

- A. Recombinant DNA technology allows scientists to cut segments of DNA from one type of organism and combine them with the genes of a second organism, also called genetic engineering.
- B. Allowing scientists to cut segments of DNA from one type of organism and combine them with the genes of a second organism, recombinant DNA technology is also called genetic engineering.
- C. Recombinant DNA technology, also called genetic engineering, allows scientists to cut segments of DNA from one type of organism and combine them with the genes of a second organism.
- D. Recombinant DNA technology, also called genetic engineering, allows scientists the cutting of segments of DNA from one type of organism and the combination of them with the genes of a second organism.
- E. Recombinant DNA technology, which is also known in more familiar terminology as genetic engineering, allows scientists the opportunity to cut segments of DNA from one type of organism and combine them with the genes of a second organism.

Correct Answer: C

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

Choice a misplaces the modifier also called genetic engineering, which should immediately follow recombinant DNA technology. Choice b turns what should be the predicate of the sentence (the main action and focus of the sentence) into a huge introductory phrase, shifting the emphasis onto also called genetic engineering, which becomes the new predicate. Choice d incorrectly uses the wordy and indirect phrases the cutting of instead of the infinitive to cut and the combination of them with instead of combine them with. Choice e is wordy.

QUESTION 682

Millions of people in the United States are affected by eating disorders, more than 90% of those afflicted are adolescents or young women.

- A. eating disorders, more than 90%
- B. eating disorders; more than 90%
- C. eating disorders, of which more than 90%
- D. Eating disorders. Ninety percent more
- E. Eating disorders, over 90%

Correct Answer: B

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

b. Choice a is a run-on sentence, which choice b corrects by changing the comma to a semicolon. Choice c creates a wordy and awkward sentence. Choice d changes the meaning of the sentence and makes it unclear--90% more of what? Choice e is also a run-on.

QUESTION 683

When a normally functioning immune system attacks a non self molecule, the system has the ability to "remember" the specifics of the foreign body, and upon subsequent encounters with the same species of molecules, it reacts accordingly.

- A. it reacts
- B. the foreign body reacts
- C. the molecules react
- D. the immune system reacts
- E. the species react

Correct Answer: D

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

Choice a is an unclear sentence because it could refer to several antecedents, including foreign body, molecules, immune system, and species. The correct antecedent is immune system. Choice e also has an error in subject-verb agreement (species requires a singular verb--reacts).

QUESTION 684

Common stocks, which are shares of ownership in a corporation, is the most direct way to participate in the fortunes of a company.

- A. is the most direct way to participate in the fortunes of a company
- B. is the most direct way for participating in the fortunes of a company.
- C. is the most direct way of participating in the fortunes of a company.
- D. are the most direct way to participate in the fortunes of a company.
- E. are the most direct way for participating in the fortunes of a company.

Correct Answer: D

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The sentence has a plural subject, common stocks, therefore it needs the plural form of the verb: are.

QUESTION 685

We now have wireless computer networks, direct-broadcast satellite television, digital wireless cable television networks, global telephone service, and global positioning systems that can pinpoint an individual's location to a few inches.

- A. that can pinpoint an individual's location to a few inches
- B. that can pinpoint an individual's location in a few inches
- C. which can pinpoint an individual's location to a few inches
- D. which can pinpoint an individual's location of a few inches
- E. which should pinpoint an individual's location to a few inches

Correct Answer: A

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

Choices B and D are incorrect because in a few inches is unidiomatic. In C, D and E the pronoun which is incorrectly used for a non-restrictive relative clause.

QUESTION 686

To deal with this explosion of data, one can use the computer and communications technology to help us sort, store, transport, and most important, understand the information.

- A. to help us sort, store, transport, and most important, understand the information.
- B. to help us sort, store, transport, and most important, to understand the information
- C. to help us to sort, store, transport, and most important, understand the information.
- D. to help one to sort, store, transport, and most important, understand the information.
- E. to help one sort, store, transport, and most important, understand the information.

Correct Answer: E

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The plural pronoun us was incorrect because it has the same referent as the pronoun one earlier in the sentence.

QUESTION 687

It will improve education, make government at all levels more cost-effective and user friendly, reduce health-car costs while improving quality, and give communities new ways to address problems such as crime and pollution.

- A. It will improve education, make government at all levels more cost-effective and user friendly, reduce health-car costs while improving quality,
- B. It will improve education, make government at all levels more cost-effective and user friendly, health-car costs will be reduced while improving quality,
- C. It will improve education, make government at all levels more cost-effective and user friendly, reduce health-car costs while improve quality,
- D. It will improve education; make government at all levels more cost-effective and user friendly, reducing health-car costs while improving quality,
- E. It will improve education, making government at all levels more cost-effective and user friendly, reducing health-car costs while improving quality,

Correct Answer: A

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The sentence makes correct use of a parallel structure. It will improve..., will make..., will reduce..., will give...

QUESTION 688

Republicans also benefited from the enthusiastic and well-organized support of conservative Christians concerning about social issues, including abortion.

- A. concerning about social issues, including abortion
- B. concerning on social issues, including abortion
- C. concerned about social issues, including abortion
- D. concerned on social issues, including abortion
- E. concerned social issues, including abortion

Correct Answer: C

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The word concerned modifies the noun Christians. The preposition that goes with it is about.

QUESTION 689

By necessary, munitions plants hired many young woman during the war; at least as much as 500,00 and more others who had not any previous experience in factory work of any kind.

- A. at least as much as 500,000 and more others who had not any
- B. at least as much as more than 500,000 others who had no
- C. more than 500,000 had not any
- D. more than 500,000 had not no
- E. there were at least 500,000 or more others without any

Correct Answer: D

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

It is idiomatic, clear, and concise. Both A and B incorrectly use much rather than many. In A and C, not any is wordy and awkward. E redundantly uses at least and more.

QUESTION 690

The expansion of the influence of the Gregorian calendar system in non-European regions can be traced from European colonies such as India and Egypt, and the independent countries, replacing traditional calendars at least for official purposes.

- A. and
- B. to
- C. and to
- D. with
- E. in addition to

Correct Answer: B

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The construction can be traced from x must be completed by to y, as in choice B.

QUESTION 691

It seemed that hardly any vote was cast on the Senate or House floor without some calculation as to how it might affect the midterm election.

- A. without some calculation as to how
- B. without there is some calculation as to how
- C. without that there is some calculation as to how
- D. without some calculation as how
- E. without some calculation to how

Correct Answer: A

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The construction as to is idiomatic. In d and E, the use of as alone or to alone is incorrect.

QUESTION 692

The acrimony in Washington, communicated to the general public to a large degree in sound-bite epithets from the principals on evening television newscasts, contributed to a sour mood between the electorate.

- A. contributed to a sour mood between the electorate
- B. contributing to a sour mood between the electorate
- C. contributed to a sour mood among the electorate
- D. contributing to a sour mood among the electorate
- E. contributing to a sour mood inside the electorate.

Correct Answer: C

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

A and B are incorrect because of the use of between for more than two. B, D and E are incorrect because of the use of the gerund form of the word where the past form, contributed, is needed.

QUESTION 693

According to a recent survey, the establishment of natural parks to preserve existing plant and animal life in Colorado is still a priority of a majority of residents, like that of earlier test groups.

- A. like that of earlier test groups
- B. at that for earlier test groups
- C. just as earlier test groups did
- D. as have earlier test groups
- E. as it was of earlier test groups

Correct Answer: E

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is E. The intended comparison should be completed by a clause beginning with as and containing a subject and verb that correspond to the subject and verb of the main clause.

QUESTION 694

Named a member of the committee to draw up a Declaration of Independence, the basic draft was completed by Thomas Jefferson in a week. .

- A. the basic draft was completed by Thomas Jefferson in a week.
- B. the basic draft Thomas Jefferson completed in a week.
- C. the basic draft was completed by Thomas Jefferson in a week.
- D. Thomas Jefferson completed the basic draft in a week.
- E. Thomas Jefferson in a week completed the basic draft.

Correct Answer: D

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. The sentence starts with the adjectival phrase, Named a member of the committee to draw up a Declaration of Independence. That phrase is supposed to modify the noun that comes immediately after it, making A, B, and C incorrect. E is incorrect because in a week incorrectly comes between the noun and verb.

QUESTION 695

Dr. Kevorkian, the so-called suicide doctor, on November 5 was imprisoned in Wayne County Jail in Detroit for his alleged role in the suicides of two men, and he then began a hunger strike.

- A. the so-called suicide doctor, on November 5 was imprisoned in Wayne County Jail in Detroit for
- B. the so-called suicide doctor, was imprisoned on November 5 in Wayne County Jail in Detroit for
- C. the called so suicide doctor, on November 5 was imprisoned in Wayne County Jail in Detroit for
- D. the called so suicide doctor, was imprisoned on November 5 in Wayne County Jail in Detroit for
- E. the so-called suicide doctor, on November 5 in Detroit was imprisoned in Wayne County Jail for

Correct Answer: B

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. B correctly removes on November 5 out from its incorrect place between the subject, Dr. Kevorkian, and the verb, was imprisoned.

QUESTION 696

The National Institute on Drug Abuse Warning Network reported an increase both in the number of admissions to hospital emergency rooms nationwide that involved drug abuse and a change in procedures used in rehabilitation clinics.

- A. reported an increase both in the number of admissions to hospital emergency rooms nationwide that involved drug abuse and a change in procedures used in rehabilitation clinics.
- B. reported both an increase in the number of admissions to hospital emergency rooms nationwide that involved drug abuse and a change in procedures
- C. reported an increase both in the number of admissions to hospital emergency rooms nationwide that involved drug abuse and procedures that changed
- D. reported an increase both in the numbers of admissions to hospital emergency rooms nationwide that involved drug abuse and a change in procedures
- E. reported both an increase in the number of admissions to emergency rooms of nationwide hospitals that involved drug abuse and a change in procedures

Correct Answer: B

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. Choice B correctly places the word both after the verb.

QUESTION 697

The World Bank, the only one of its kind, provides loans to developing member countries, gives technical assistance for development projects, and for projects from other public and private sources encourages co-financing.

- A. provides loans to developing member countries, gives technical assistance for development projects, and for projects from other public and private sources encourages co-financing.
- B. provides loans to developing member countries, gives technical assistance for development projects, and for projects from other public and private sources encouraging co-financing.
- C. provides loans to developing member countries, gives technical assistance for development projects, and for projects from other public and private sources encouraged co-financing.
- D. provides loans to developing member countries, gives technical assistance for development projects, and encourages co-financing for projects from other public and private sources.
- E. provides loans to developing member countries, gives technical assistance for development projects, but encourages co-financing for projects from other public and private sources.

Correct Answer: B

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. Choices A, B and C all violate parallelism by putting the indirect object ahead of the verb, and for project from other public and private sources... The use of but in choice E is incorrect because encourages is not contrast to provides and gives

QUESTION 698

The only way to captivate the audience is to surprise them constantly with new scenes and new actors before they completely lose interest in the play.

- A. to surprise them constantly with new scenes and new actors before they completely lose interest in the play.
- B. if they are surprised constantly with new scenes and new actors before they completely lose interest in the play.
- C. for them to be surprised constantly with new scenes and new actors before they completely lose interest in the play.
- D. if the audience is surprised constantly with new scenes and new actors before they completely lose interest in the play.
- E. to surprise it constantly with new scenes and new actors before it completely loses interest in the play.

Correct Answer: E

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is E. For parallelism, the linking verb is should like two infinitives: The only way to captivate....is to surprise, therefore B, C, and D are

incorrect. Choice A is incorrect because of the plural pronouns they and them, which do not agree with the singular noun audience.

QUESTION 699

The British colonies in North America attracted a mass immigration of religious dissenters and poor people throughout the 17th and 18th centuries, coming from all parts of the British Isles, Germany, the Netherlands, and other countries.

- A. The British colonies in North America attracted a mass immigration of religious dissenters and poor people throughout the 17th and 18th centuries, coming
- B. The British colonies in North America have attracted a mass immigration of religious dissenters and poor people throughout the 17th and 18th centuries, coming
- C. The British colonies in North America has attracted a mass immigration of religious dissenters and poor people throughout the 17th and 18th centuries, coming
- D. The British colonies in North America was attracting a mass immigration of religious dissenters and poor people throughout the 17th and 18th centuries, coming
- E. The British colonies in North America have attracted a mass immigration of religious dissenters and poor people throughout the 17th and 18th centuries, to come

Correct Answer: A

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is A. The correct form of the verb attracted is the past simple.

QUESTION 700

The highest number of structural fires in the country are in Buffalo, New York, which the cause of fourteen percent of them were deliberately set or are suspected of having been deliberately set.

- A. which the cause of fourteen percent of them were
- B. where the cause of fourteen percent of them were
- C. where fourteen percent of the fires were
- D. which has fourteen percent of the fires
- E. in which fourteen percent of them have fires

Correct Answer: C

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is C. Choice C uses a clear, direct, and economical adjective clause to indicate the percentage of fires

QUESTION 701

Old English had three genders that resembled those of the Germans and so was probably very difficult for a foreign traveler to learn in a short time.

- A. Old English had three genders that resembled those of the Germans
- B. Old English had three genders resembling those of the Germans
- C. The three genders of Old English resembled a German's
- D. Old English's three genders resembled the German's
- E. The three genders of Old English that resembled those of the Germans

Correct Answer: B

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. The sentence requires a subject appropriate to both members of a compound predicate, the second member being and so was probably very difficult for a foreign traveler to learn in a short time. Old English makes a logical subject. A is incorrect because of the use of the pronoun that. In D is seems that the three genders belonged to one German.

QUESTION 702

Linguistically, the Pokot seem to be related to numerous peoples who live in the region with both ties to the Nilo-Hamitic peoples who come from the north and to Bantu peoples who come from central Africa.

- A. with both ties to the Nilo-Hamitic peoples who come from the north and to Bantu peoples who come from central Africa.
- B. with ties both to the Nilo-Hamitic peoples who come from the north and to Bantu peoples who come from central Africa.
- C. with ties both to the Nilo-Hamitic peoples who come from the north and Bantu peoples who come from central Africa.
- D. both with ties to the Nilo-Hamitic peoples who come from the north and to Bantu peoples who come from central Africa.
- E. both having ties to the Nilo-Hamitic peoples who come from the north and to Bantu peoples who come from central Africa

Correct Answer: B

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. Choice B places the word both in the best place in the sentence. The Pokot are related both to... and to....

QUESTION 703

Having logged thousands of hours watching primates from chimpanzees to macaques, chimps and other primates are no longer thought to be natural-born killers by Dr. Swenson, they are attuned to peacemaking.

- A. chimps and other primates are no longer thought to be natural-born killers by Dr. Swenson, they
- B. Dr. Swenson has come to believe that far from being natural-born killers, chimps and other primates
- C. Dr. Swenson has now the belief that far from being natural-born killers, chimps and other primates
- D. chimps and other primates are no longer thought to be natural-born killers by Dr. Swenson, they
- E. chimps and other primates are no more thought to be natural-born killers by Dr. Swenson, they

Correct Answer: B

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. The noun that comes directly after the comma is modified by having logged thousands of hours watching primates from chimpanzees to macaques. Answers A, D, and E illogically have the chimps observing other primates.

QUESTION 704

In the thirties and forties, devotees of Willa Cather's maintained that her writing has all the qualities found in the highest order of American writers of the nineteenth and twentieth century.

- A. Cather's maintained that her writing has
- B. Cather's maintained that her writing had
- C. Cather's have maintained that her writing had
- D. Cather maintained that her writing had
- E. Cather maintained that her writing has

Correct Answer: D

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. The phrase devotees of Willa Cather presents a complete possessive without adding an apostrophe to her last name. Because the sentence describes a past event, the verb has in the present tense is incorrect.

QUESTION 705

William Hornby acquired bison herds for breeding stock hoping that this move would eventually lead to increasing in their numbers, and a fortification of their environment.

- A. increasing in their numbers,
- B. an increase in their numbers,
- C. their increase in numbers,
- D. an increasing in numbers,
- E. an increasing in the numbers of them,

Correct Answer: B

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. Choice B clearly and correctly uses parallel noun phrases to list the effects of Hornby's actions: an increase in... a fortification of

QUESTION 706

The strand fills with water during the rainy season that the peat then holds and keeps it humid, all of which creates conditions enabling trees to grow.

- A. enabling trees to grow.
- B. for the trees to grow.
- C. for growing trees.
- D. that enable the trees to grow.
- E. that the trees can grow.

Correct Answer: D

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. In choices B and C the preposition for is used unidiomatically. In choice A the omission of the word the makes it sound as though these conditions are necessary for all trees.

QUESTION 707

People can debate the aesthetic merits of these overwrought, disquieting, sometimes gruesome works of art, but no one can dispute their creators'

mastery of the paintbrush as a blunt instrument.

- A. but no one can dispute their creators' mastery of the paintbrush as a blunt instrument.
- B. but none can dispute their creators' mastery of the paintbrush as a blunt instrument.
- C. but not a one can dispute their creators' mastery of the paintbrush as a blunt instrument.
- D. but no person can dispute their creators' mastery of the paintbrush as a blunt instrument.
- E. but none can dispute to their creators' mastery of the paintbrush as a blunt instrument.

Correct Answer: B

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. The use of none is idiomatically correct. Choice E is incorrect because dispute can only be followed by a direct object.

QUESTION 708

Drinking milk enriched with vitamin D may significantly reduce the risk of rickets and also aid for sufferers of heart disease, according to studies recently completed at the University of California in San Francisco.

- A. significantly reduce the risk of rickets and also aid for
- B. be significant in reducing the risk of rickets and aid for
- C. significantly reduce the risk of rickets and aid
- D. cause a significant reduction in the risk of rickets and aid to
- E. significantly reduce the risk of rickets as well as aiding

Correct Answer: A

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is A. It is the distortion between how the person really is and how he perceives himself that is the most important factor, as opposed to the level of self-perception itself.

QUESTION 709

Robinson is a botanist whose dream is to reestablish an authentic pre-human piece of Hawaii, a place now awash with introduced species of plants and animals.

- A. who has the dream to reestablish an authentic pre-human piece of Hawaii,
- B. whose dream it is to reestablish an authentic pre-human piece of Hawaii,
- C. who it is his dream to reestablish an authentic pre-human piece of Hawaii,
- D. that is dreaming to reestablish an authentic pre-human piece of Hawaii,
- E. whose dream is to reestablish an authentic pre-human piece of Hawaii,

Correct Answer: B

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is B. According to the passage, when negative social information is encountered by a person with a highly elevated level of self-perception, it may lead to violence.

QUESTION 710

As literary criticism grows more complex, students majoring in specialized areas like those of post-colonialism and Marxist discourse have been becoming increasingly successful at finding positions in the faculties of top universities.

- A. majoring in specialized areas like those of post-colonialism and Marxist discourse have been becoming increasingly
- B. who major in such specialized areas as post-colonialism and Marxist discourse are becoming more and more
- C. who majored in specialized areas such as those of post-colonialism and Marxist discourse are being increasingly
- D. who major in specialized areas like those of post-colonialism and Marxist discourse have been becoming more and more
- E. having majored in such specialized areas as post-colonialism and Marxist discourse are being increasingly

Correct Answer: D

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. If the shark can be successfully bred in captivity, it is possible to continue production of the drug without threatening the shark with extinction.

QUESTION 711

The woodland sub-species were in isolation from contact with humans longer than either their marsh cousins or the tree-dwelling sub-species.

- A. in isolation from contact with humans longer than

- B. isolated from contact with humans longer than
- C. in isolation from contact with humans longer than were
- D. isolated from contact with humans longer than were
- E. in isolation and without contacts with humans longer than

Correct Answer: C

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is C. The infinitive to abolish follows the verb ordered; producing the grammatical and idiomatic sequence X ordered Y to do Z.

QUESTION 712

For almost five thousand years after its beginning 2.5 million years ago, Homo habilis roamed the earth, lived in semi-permanent camps, gathered food and shared their economy.

- A. For almost five thousand years after its beginning 2.5 million years ago,
- B. Beginning 2.5 million years ago for a period of almost five thousand years,
- C. Beginning a period of almost five thousand years 2.5 million years ago,
- D. During five thousand years, a period beginning 2.5 million years ago,
- E. Over a period of five thousand years beginning 2.5 million years ago,

Correct Answer: E

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is E. Choice E is precise and idiomatically phrased. Choice A is illogical because it refers grammatically to Homo habilis. Choice B is less clear and direct.

QUESTION 713

Despite protests from some share holders, committee members have ordered the levels of department head involvement to be curtailed and that the advertising program be undertaken.

- A. the levels of department head involvement to be curtailed and that the advertising program be
- B. the levels of department head involvement to be curtailed and that the advertising program being

- C. the measure of levels of department head involvement to be curtailed and the advertising program to be
- D. the levels of department head involvement to be curtailed with their advertising program being
- E. that the levels of department head involvement be curtailed and the advertising program be

Correct Answer: E

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is E. Choice E clearly and correctly uses parallel phrases: the levels of department head involvement be.... The advertising program be.....

QUESTION 714

Advances in networking technology and home computers have made it easy for millions of Americans to work in their homes, often facilitating the communication between the manager, who continues to work on-site at the office, with his distant employees.

- A. communication between the manager, who continues to work on-site at the office, with his distant employees
- B. communication between the manager, who continues the work on-site at the office, with his distant employees
- C. communication between the manager, who continues to work on-site at the office, to his distant employees
- D. communication between the manager, who continues to work on-site at the office, and his distant employees
- E. communication between the manager, who continues to work on-site at the office, with his distance employees

Correct Answer: D

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. The communication has to be between the manager and his employee.

QUESTION 715

There are any number of skilled freelancers who can develop strategy and create marketing materials with a keen eye to using proven methods, but also to developing new and innovative techniques.

- A. with a keen eye to using proven methods, but also to developing new and innovative techniques
- B. with a keen eye for using proven methods, and also to developing new and innovative techniques
- C. with a keen eye not only to using proven methods, but also to developing new and innovative techniques

- D. with a keen eye to using proven methods, but to developing now and innovative techniques
- E. with a keen eye not only to using proven methods, and also to developing now and innovative techniques

Correct Answer: C

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is C. Choice C correctly develops the parallel not only... but also...

QUESTION 716

The expedition did not enter the water-filled clearing because it believed that to do it endangers the rare Spanish moss hanging from the trees.

- A. to do it endangers
- B. doing it endangers
- C. to do this would endanger
- D. doing so would endanger
- E. to do it would endanger

Correct Answer: D

Section: Sentence Correction Questions

Explanation

Explanation/Reference:

Explanation:

The best answer is D. Choice D appropriately used the adverb so to refer back to the verb accord

QUESTION 717

The rising of costs of medication has created growing concern about the long-term threat the virus presents to human health on a national level.

- A. The rising of costs
- B. Rising costs
- C. The rising cost
- D. Because the rising cost
- E. Because of rising costs

Correct Answer: C

Section: Sentence Correction Questions**Explanation****Explanation/Reference:**

Explanation:

The best answer is C. Choice A is unidiomatic, and B costs...has lacks subject-verb agreement. Choices D and E produce sentence fragments since Because makes the clause subordinate rather than independent.

QUESTION 718

While royal governor of New Jersey, William Franklin's conviction that the colonies should remain part of England was not unlike that of his father Benjamin Franklin, who initially preferred a continued association with England, though he eventually played a role in forging America's independence, helping craft the Declaration of Independence after a change of heart

- A. not unlike that of his father Benjamin Franklin, who initially preferred
- B. not unlike his father Benjamin Franklin, who initially preferred
- C. like his father Benjamin Franklin, and his initial preference
- D. like that of his father Benjamin Franklin, for preferring
- E. as that of his father Benjamin Franklin, who initially preferred

Correct Answer: A

Section: Sentence Correction Questions**Explanation****Explanation/Reference:**

Explanation:

The best answer is A. Choices B and C present faulty comparisons, comparing William's conviction with Benjamin Franklin himself. Choice D does not make clear whether it was the father or the son who helped craft the Declaration of Independence.

QUESTION 719

After adopting broadband internet access, wireless personal digital assistants, and super-fast home PCs, Weston Insurance has hired new employees, which doubles to 250 the junior staff in the claims department working from home.

- A. which doubles to 250 the junior staff in the claims department
- B. doubling to 250 the number of junior staff members in the claims department
- C. which doubles to 250 the junior staff of the claims department
- D. doubling to 250 the number of junior staff members of the claims department
- E. which doubles to 250 the junior staff in the claims department that

Correct Answer: B

Section: Sentence Correction Questions**Explanation****Explanation/Reference:**

Explanation:

The best answer is B. The pronoun which should be used to refer to a previously mentioned noun, not to the idea expressed in an entire clause. In A, C, and E there is no specific noun.