

100-105.exam.465q

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Cisco 100-105

Interconnecting Cisco Networking Devices Part 1 (ICND)



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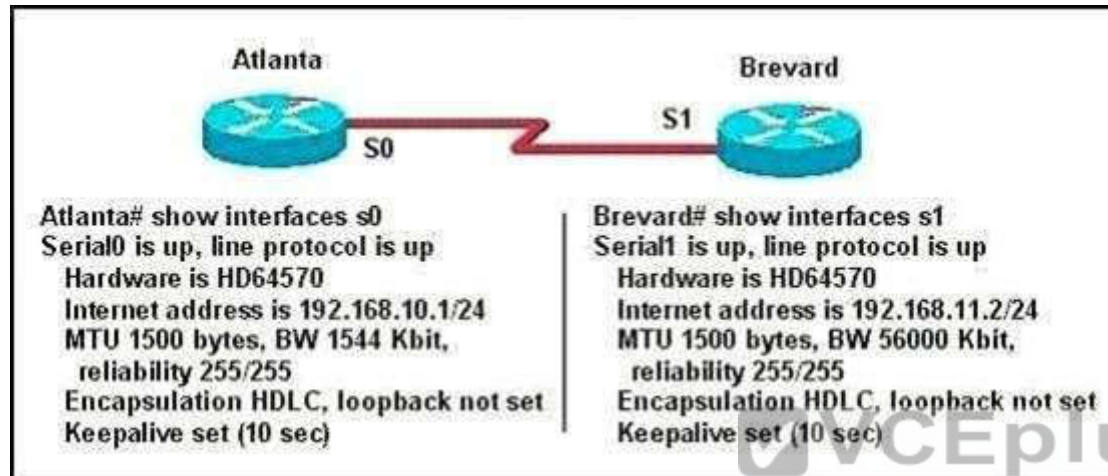
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Exam A

QUESTION 1

Two routers named Atlanta and Brevard are connected by their serial interfaces as shown in the exhibit, but there is no data connectivity between them. The Atlanta router is known to have a correct configuration.



Given the partial configurations shown in the exhibit, what is the problem on the Brevard router that is causing the lack of connectivity?

- A. A loopback is not set.
- B. The IP address is incorrect.
- C. The subnet mask is incorrect.
- D. The serial line encapsulations are incompatible.
- E. The maximum transmission unit (MTU) size is too large.
- F. The bandwidth setting is incompatible with the connected interface.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 2

What are two benefits of using a single OSPF area network design? (Choose two.)

- A. It is less CPU intensive for routers in the single area.
- B. It reduces the types of LSAs that are generated.
- C. It removes the need for virtual links.
- D. It increases LSA response times.
- E. It reduces the number of required OSPF neighbor adjacencies.

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 3

What command sequence will configure a router to run OSPF and add network 10.1.1.0 /24 to area 0?

- A. router ospf area 0
network 10.1.1.0 255.255.255.0 area 0
- B. router ospf
network 10.1.1.0 0.0.0.255
- C. router ospf 1
network 10.1.1.0 0.0.0.255 area 0
- D. router ospf area 0
network 10.1.1.0 0.0.0.255 area 0
- E. router ospf
network 10.1.1.0 255.255.255.0 area 0
- F. router ospf 1
network 10.1.1.0 0.0.0.255

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 4

Refer to the exhibit. If the router Cisco returns the given output and has not had its router ID set manually, what value will OSPF use as its router ID?

```
Cisco#show ip interface brief
Interface          IP-Address      OK? Method Status  Protocol
FastEthernet0/0    192.168.1.1     YES manual up      up
FastEthernet0/1    172.16.1.1      YES manual up      up
Loopback0          1.1.1.1         YES manual up      up
Loopback1          2.2.2.2         YES manual up      up
Vlan1              unassigned      YES unset  administratively down down
```

- A. 192.168.1.1
- B. 172.16.1.1
- C. 1.1.1.1
- D. 2.2.2.2

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 5

What OSPF command, when configured, will include all interfaces into area 0?

- A. network 0.0.0.0 255.255.255.255 area 0
- B. network 0.0.0.0 0.0.0.0 area 0
- C. network 255.255.255.255 0.0.0.0 area 0
- D. network all-interfaces area 0

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 6

Which statement describes the process ID that is used to run OSPF on a router?

- A. It is globally significant and is used to represent the AS number.
- B. It is locally significant and is used to identify an instance of the OSPF database.
- C. It is globally significant and is used to identify OSPF stub areas.
- D. It is locally significant and must be the same throughout an area.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:



QUESTION 7

After the show ip route command has been entered, the following routes are displayed. Which route will not be entered into the routing table of a neighboring router?

- A. R 192.168.8.0/24 [120/1] via 192.168.2.2, 00:00:10, Serial0
- B. R 192.168.11.0/24 [120/7] via 192.168.9.1, 00:00:03, Serial1
- C. C 192.168.1.0/24 is directly connected, Ethernet0
- D. R 192.168.5.0/24 [120/15] via 192.168.2.2, 00:00:10, Serial0

Correct Answer: D

Section: (none)

Explanation

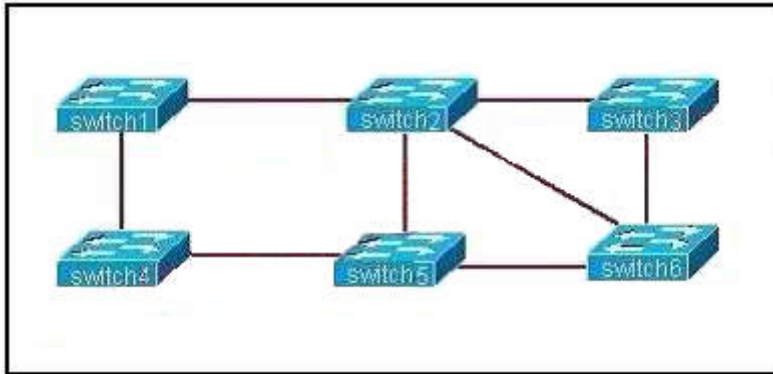
Explanation/Reference:

Explanation:

The route 192.168.5.0/24 currently has the metric of 15 so this router will add 1 hop count before sending out to its neighboring router. With RIP, a metric of 16 means that network is down -> it will not be installed in the routing table of the neighboring router.

QUESTION 8

Refer to Exhibit. Based on the network shown in the graphic which option contains both the potential networking problem and the protocol or setting that should be used to prevent the problem?



- A. routing loops, hold down timers
- B. switching loops, split horizon
- C. routing loops, split horizon
- D. switching loops, VTP
- E. routing loops, STP
- F. switching loops, STP

Correct Answer: F

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 9

If all OSPF routers in a single area are configured with the same priority value, what value does a router use for the OSPF router ID in the absence of a loopback interface?

- A. the IP address of the first Fast Ethernet interface
- B. the IP address of the console management interface
- C. the highest IP address among its active interfaces

- D. the lowest IP address among its active interfaces
- E. the priority value until a loopback interface is configured

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 10

The OSPF Hello protocol performs which of the following tasks? (Choose two.)

- A. It provides dynamic neighbor discovery.
- B. It detects unreachable neighbors in 90 second intervals.
- C. It maintains neighbor relationships.
- D. It negotiates correctness parameters between neighboring interfaces.
- E. It uses timers to elect the router with the fastest links as the designated router.
- F. It broadcasts hello packets throughout the internetwork to discover all routers that are running OSPF.

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 11

Which of the following is a characteristic of full-duplex communication?

- A. It is a CSMA/CD network.
- B. It is a CSMA/CA network.
- C. It is point-to-point only.
- D. Hub communication is done via full duplex.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 12

Which commands display information about the Cisco IOS software version currently running on a router? (Choose three.)

- A. show running-config
- B. show stacks
- C. show version
- D. show flash
- E. show protocols
- F. show IOS

Correct Answer: ACD

Section: (none)

Explanation

Explanation/Reference:

Explanation:

**QUESTION 13**

After the shutdown command has been issued on the serial 0/0 interface, what will be displayed when the show interface serial 0/0 command is issued by the administrator?

- A. Serial0/0 is administratively down, line protocol is down
- B. Serial0/0 is down, line protocol is down
- C. Serial0/0 is up, line protocol is down
- D. Serial0/0 is administratively down, line protocol is administratively down
- E. Serial0/0 is up, line protocol is up
- F. Serial0/0 is down, line protocol is up

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 14

Refer to the output of the three router commands shown in the exhibit. A new technician has been told to add a new LAN to the company router. Why has the technician received the error message that is shown following the last command?

Router# **show version**

Cisco Internetwork Operating System Software
IOS (tm) C2600 Software (C2600-DO3S-M), Version 12.1(5)T12,
RELEASE SOFTWARE (fc1)
TAC Support: <http://www.cisco.com/tac>
Copyright (c) 1986-2002 by cisco Systems, Inc.
Copyright (c) 1986-2002 by cisco Systems, Inc.
Image text-base: 0x80008088, data-base: 0x81169C28

ROM: System Bootstrap, Version 12.2(10r)1, RELEASE
SOFTWARE (fc1)

Router uptime is 10 minutes
System returned to ROM by power-on
System image file is "flash:c2600-do3s-mz.121-5.T12.bin"

cisco 2621 (MPC860) processor (revision 0x00) with
44032K/5120K bytes of memory

Processor board ID JAD06390AR4 (617842770)

M860 processor: part number 0, mask 49

Bridging software.

X.25 software, Version 3.0.0.

Basic Rate ISDN software, Version 1.1.

2 FastEthernet/IEEE 802.3 interface(s)

2 Low-speed serial(sync/async) network interface(s)

1 ISDN Basic Rate interface(s)

32K bytes of non-volatile configuration memory.

16384K bytes of processor board System flash (Read/Write)

Configuration register is 0x2102

Router# **configure terminal**

Enter configuration commands, one per li
End with CNTL/Z

Router(config)# **interface e0**

% Invalid input detected at '^' marker.

A. The interface was already configured.

- B. The interface type does not exist on this router platform.
- C. The IOS software loaded on the router is outdated.
- D. The router does not support LAN interfaces that use Ethernet.
- E. The command was entered from the wrong prompt.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

From the output of the "show version" command, we learn that there are only 2 FastEthernet interfaces (2 FastEthernet/IEEE 802.3 interfaces) and this router does not have any Ethernet interface so an error will occur when we enter the "interface e0" command.

QUESTION 15

The system LED is amber on a Cisco Catalyst 2950 series switch. What does this indicate?

- A. The system is malfunctioning.
- B. The system is not powered up.
- C. The system is powered up and operational.
- D. The system is forwarding traffic.
- E. The system is sensing excessive collisions.



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The system LED shows whether the system is receiving power and functioning properly.

Below lists the LED colors and meanings:

Color

System Status

Off

System is not powered up.

Green

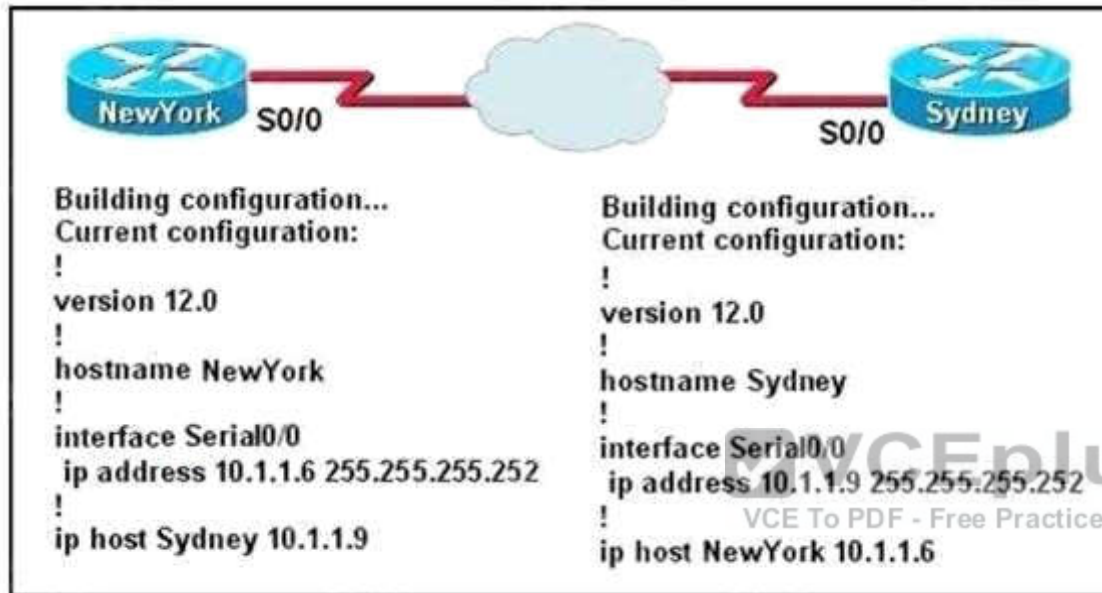
System is operating normally.

Amber

System is receiving power but is not functioning properly. <http://www.cisco.com/en/US/docs/switches/lan/catalyst2950/hardware/installation/guide/hgovrev.html>

QUESTION 16

Refer to the topology and partial configurations shown in the exhibit. The network administrator has finished configuring the NewYork and Sydney routers and issues the command ping Sydney from the NewYork router. The ping fails. What command or set of commands should the network administrator issue to correct this problem?



- A. Sydney(config)# interface s0/0
Sydney(config-if)# cdp enable
- B. Sydney(config)# interface s0/0
Sydney(config-if)# no shut
- C. Sydney(config)# line vty 0 4
Sydney(config)# login
Sydney(config)# password Sydney
- D. Sydney(config)# ip host Sydney 10.1.1.9
- E. Sydney(config)# interface s0/0
Sydney(config-if)# ip address 10.1.1.5 255.255.255.252 NewYork(config)# ip host Sydney 10.1.1.5

Correct Answer: E

Section: (none)

Explanation

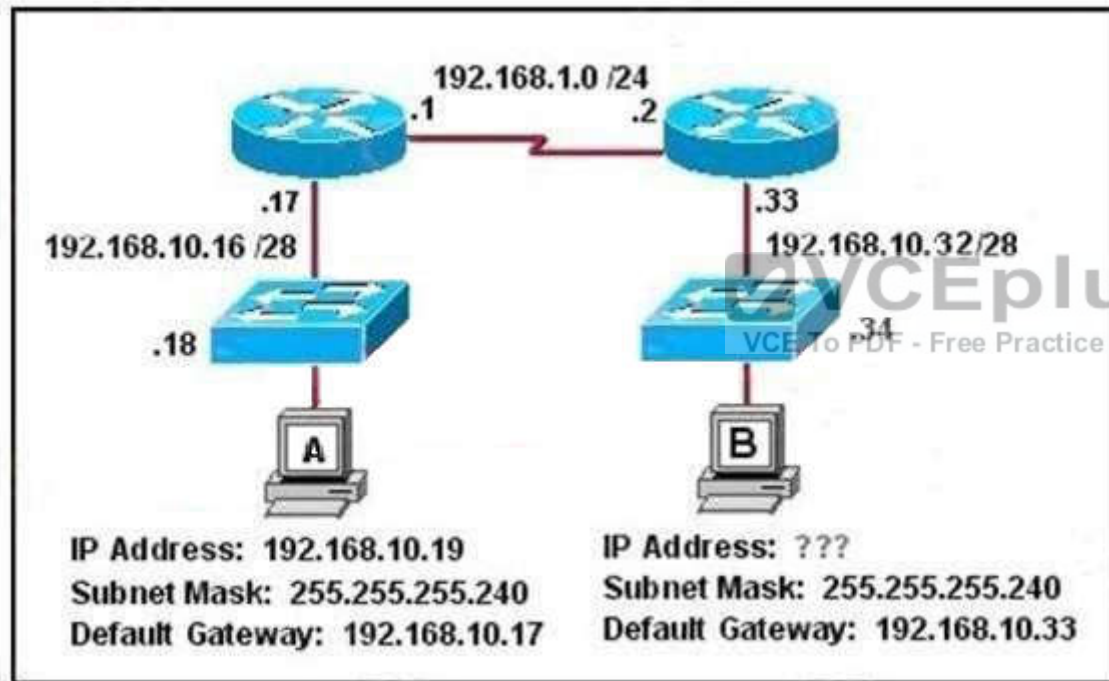
Explanation/Reference:

Explanation:

The IP addresses on the two Serial interfaces of two routers are not in the same subnet so they could not recognize each other and the ping failed. Therefore we must correct the IP address of one of the router so that they are in the same subnet.

QUESTION 17

Refer to the exhibit. Host B has just been added to the network and must acquire an IP address. Which two addresses are possible addresses that will allow host B to communicate with other devices in the network? (Choose two.)



- A. 192.168.10.32
- B. 192.168.10.38
- C. 192.168.10.46
- D. 192.168.10.47
- E. 192.168.10.49

F. 192.168.10.51

Correct Answer: BC

Section: (none)

Explanation

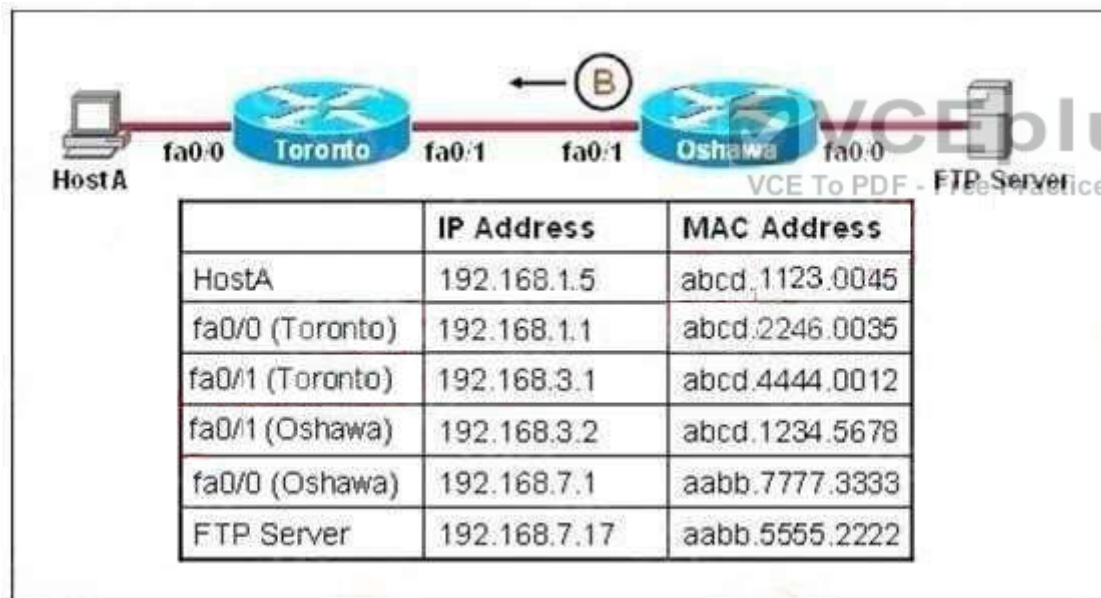
Explanation/Reference:

Explanation:

The IP address of host B must be in the range of 192.168.10.32/28 subnet, which ranges from 192.168.10.32 to 192.168.10.47 (Increment: 16), except the IP addresses of 192.168.10.32, 192.168.10.46 (which are the network and broadcast addresses of the subnet), 192.168.10.33, 192.168.10.34 (which have been assigned to the interface's router and the switch). Therefore, there are only two IP addresses of 192.168.10.38 & 192.168.10.46.

QUESTION 18

Refer to the exhibit. HostB is sending a file to HostA. B represents the frame as it leaves the Oshawa router. What is the Layer 2 destination address of the frame at this point?



A. abcd.1123.0045

B. abcd.1234.5678

C. abcd.2246.0035

- D. abcd.4444.0012
- E. aabb.5555.2222

Correct Answer: D

Section: (none)

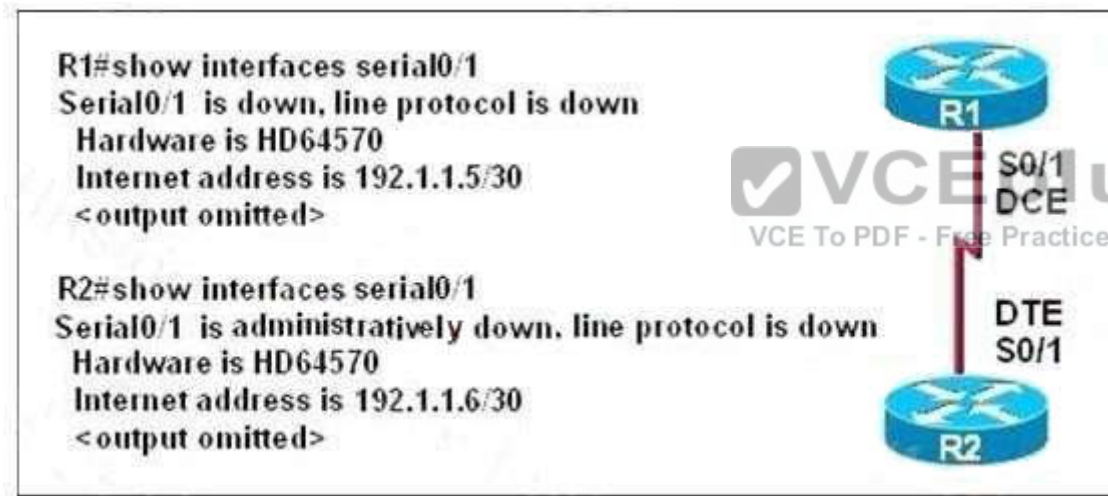
Explanation

Explanation/Reference:

Explanation:

QUESTION 19

Refer to the exhibit. A network technician is unable to ping from R1 to R2. Using the output of the show interfaces serial0/1 command, what should the administrator do to correct the problem?



- A. Replace the serial cable between R1 and R2.
- B. Reseat the serial connectors on the R1 and R2 routers.
- C. Configure the serial0/1 interface on R2 with the no shutdown command.
- D. Configure the serial0/1 interface on R1 with the clock rate 56000 command.
- E. Configure the serial0/1 interface on R1 with the ip address 192.1.1.7 255.255.255.252 command.

Correct Answer: C

Section: (none)

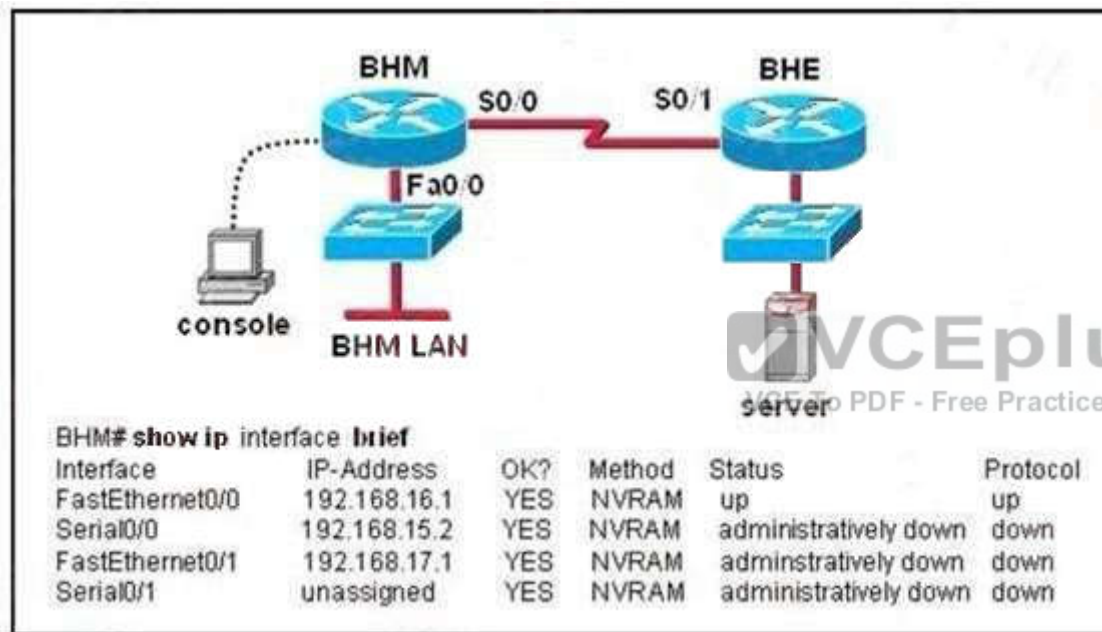
Explanation

Explanation/Reference:

Explanation:

QUESTION 20

Examine the network diagram and router output shown in the exhibit. Users on the BHM LAN are unable to access the server attached to the BHE router. What two things should be done to fix this problem? (Choose two.)



- A. Enter the configuration mode for interface fastethernet0/0.
- B. Enter the configuration mode for interface serial0/0.
- C. Enter the configuration mode for interface serial0/1.
- D. Issue the run command.
- E. Issue the enable command.
- F. Issue the no shutdown command.

Correct Answer: BF

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 21

From where does a small network get its IP network address?

- A. Internet Assigned Numbers Authority (IANA)
- B. Internet Architecture Board (IAB)
- C. Internet Service Provider (ISP)
- D. Internet Domain Name Registry (IDNR)

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:



QUESTION 22

A network administrator has subnetted the 172.16.0.0 network using a subnet mask of 255.255.255.192. A duplicate IP address of 172.16.2.120 has accidentally been configured on a workstation in the network. The technician must assign this workstation a new IP address within that same subnetwork. Which address should be assigned to the workstation?

- A. 172.16.1.80
- B. 172.16.2.80
- C. 172.16.1.64
- D. 172.16.2.64
- E. 172.16.2.127
- F. 172.16.2.128

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 23

Refer to the exhibit. A network technician is unable to ping from R1 to R2.
What will help correct the problem?

```
R1#sh int ser0/1
Serial0/1 is up, line protocol is down
  Hardware is GT96K Serial
  Internet address is 192.1.1.1/30
  MTU 1500 bytes, BW 1544 Kbit/sec, DLY 20000 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation HDLC, loopback not set
  Keepalive set (10 sec)
R2#sh int serial 0/1
Serial0/1 is up, line protocol is down
  Hardware is GT96K Serial
  Internet address is 192.1.1.2/30
  MTU 1500 bytes, BW 1544 Kbit/sec, DLY 20000 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation HDLC, loopback not set
  Keepalive set (10 sec)
```

- A. Ensure that the serial cable is correctly plugged in to the interfaces.
- B. Apply the clock rate 56000 configuration command to the serial0/1 interface of R1.
- C. Configure the serial0/1 interfaces on R1 and R2 with the no shutdown command.
- D. Change the address of the serial0/1 interface of R1 to 192.1.1.4.
- E. Change the subnet masks of both interfaces to 255.255.255.240.

Correct Answer: A

Section: (none)

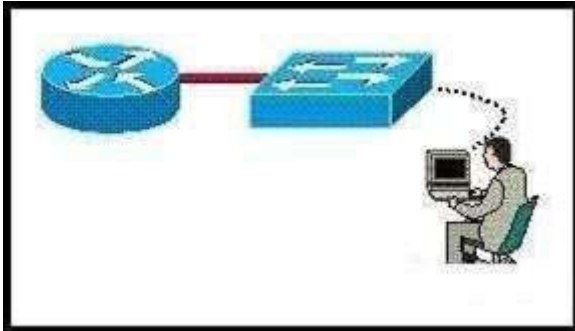
Explanation

Explanation/Reference:

Explanation:

QUESTION 24

SW-C has just been added to the network shown in the graphic.



What is the purpose of assigning a default gateway to this switch?

- A. allows connectivity to Router B from the switch prompt
- B. allows console port connectivity to the switch from Host A
- C. allows connectivity to remote network devices from Host B
- D. allows the switch to pass traffic between Host A and Host B

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 25

What is the maximum number of bits that can be borrowed to create subnets if a Class B network address is being used?

- A. 2
- B. 6
- C. 8
- D. 14
- E. 16

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 26

Which three network addresses are reserved for private network use? (Choose three.)

- A. 10.0.0.0
- B. 172.15.0.0
- C. 172.31.0.0
- D. 192.162.24.0
- E. 192.168.255.0
- F. 224.192.0.0

Correct Answer: ACE

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 27

Which form of NAT maps multiple private IP addresses to a single registered IP address by using different ports?

- A. static NAT
- B. dynamic NAT
- C. overloading
- D. overlapping
- E. port loading

Correct Answer: C

Section: (none)

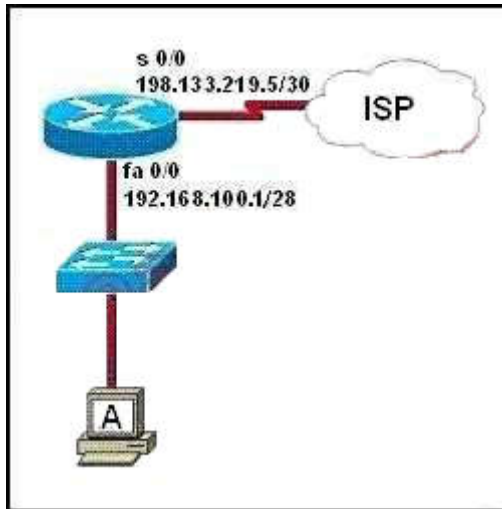
Explanation

Explanation/Reference:

Explanation:

QUESTION 28

Refer to the exhibit. A network technician has added host A to the network. Host A cannot communicate on the network. A ping that is issued on the host to address 127.0.0.1 fails. What is the problem?



- A. The router is not forwarding the ping packets to network 127.0.0.0.
- B. The remote host at 127.0.0.1 is unreachable.
- C. The default gateway is incorrect.
- D. The IP address of host A is incorrect.
- E. The TCP/IP protocols are not loaded.

Correct Answer: E

Section: (none)

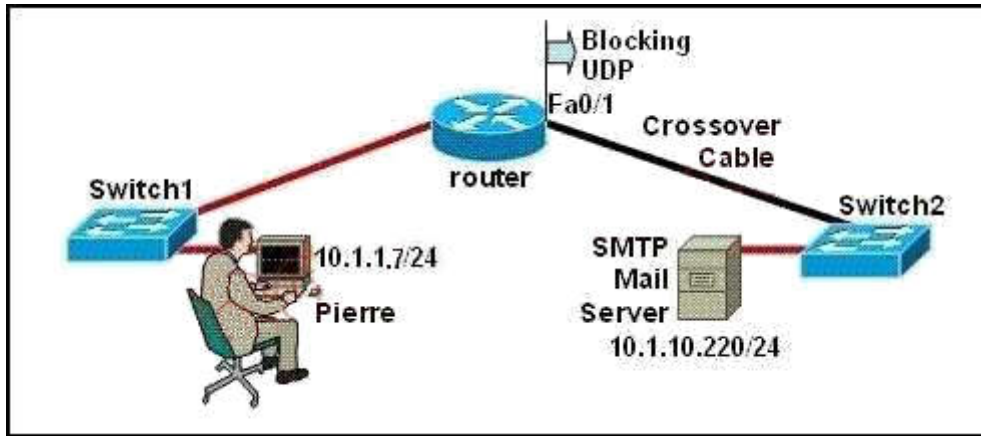
Explanation

Explanation/Reference:

Explanation:

QUESTION 29

Refer to the exhibit. Pierre has just installed the mail server and Switch2. For security reasons UDP packets are not permitted outbound on the Fa0/1 router interface. Pierre is now at his workstation testing the new installation and is not able to establish SMTP communication to the mail server.



What is the most likely cause for lack of communication between Pierre's workstation and the mail server?

- A. The crossover cable should be a straight-through cable.
- B. UDP is blocked coming out of the Fa0/1 interface on the router.
- C. The server should be directly connected to the router.
- D. The IP addresses are all on the same network. No router is required.

Correct Answer: A

Section: (none)

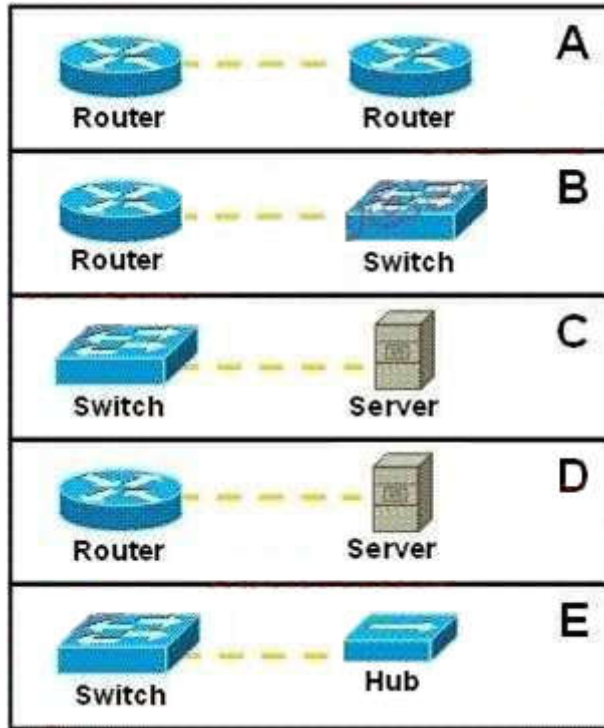
Explanation

Explanation/Reference:

Explanation:

QUESTION 30

Refer to the exhibits labeled A through E. All devices are to be connected over Ethernet. Which three device-to-device configurations are likely to require the use of a crossover connection? (Choose three.)



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

Correct Answer: ADE

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 31

Refer to the exhibit. Which two statements are true of the interface configuration? (Choose two.)

```
Router# show interface s0
Serial0 is up, line protocol is up
  Hardware is HD64570
  Internet address is 10.140.1.2/24
  MTU 1500 bytes, BW 1544 Kbit, DLY 20000 usec, rely 255/255, load 1/255
  Encapsulation PPP, loopback not set, keepalive set (10 sec)
  LCP Open
  Open: IPCP, CDPCP
  Last input 00:00:05, output 00:00:05, output hang never
  Last clearing of "show interface" counters never
  Queueing strategy: fifo
  Output queue 0/40, 0 drops; input queue 0/75, 0 drops
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
    38021 packets input, 5656110 bytes, 0 no buffer
    Received 23488 broadcasts, 0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored, 0 abort
    38097 packets output, 2135697 bytes, 0 underruns
    0 output errors, 0 collisions, 6045 interface resets
    0 output buffer failures, 0 output buffers swapped out
    482 carrier transitions
  DCD=up DSR=up DTR=up RTS=up CTS=up
```

- A. The encapsulation in use on this interface is PPP.
- B. The default serial line encapsulation is in use on this interface.
- C. The address mask of this interface is 255.255.255.0.
- D. This interface is connected to a LAN.
- E. The interface is not ready to forward packets.

Correct Answer: AC

Section: (none)

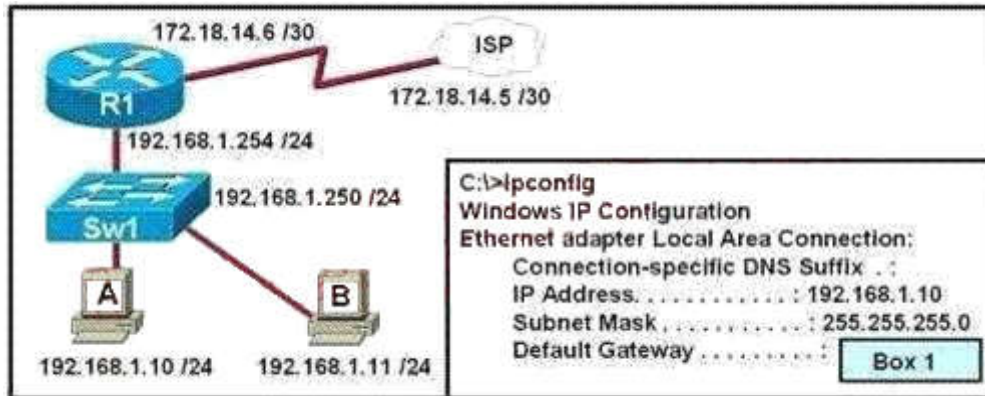
Explanation

Explanation/Reference:

Explanation:

QUESTION 32

Refer to the exhibit. What value should be displayed in Box 1 of the ipconfig output of host A?



- A. 172.18.14.5
- B. 172.18.14.6
- C. 192.168.1.10
- D. 192.168.1.11
- E. 192.168.1.250
- F. 192.168.1.254

Correct Answer: F

Section: (none)

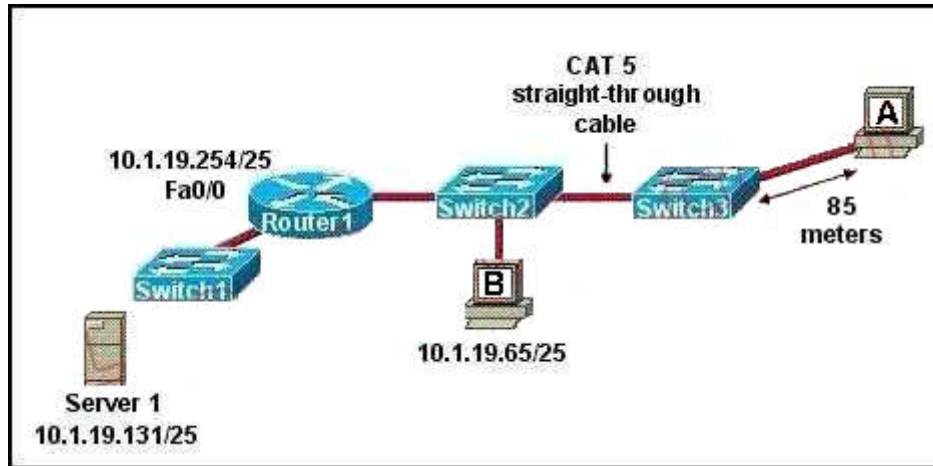
Explanation

Explanation/Reference:

Explanation:

QUESTION 33

The internetwork shown in the diagram is experiencing network connectivity problems. What is the cause of the problem?



- A. The cabling connecting host A to Switch3 is too long.
- B. The address of host B is a broadcast address.
- C. The IP address of interface Fa0/0 of Router1 is not a usable address.
- D. The cable connecting Switch2 and Switch3 should be a crossover.
- E. The IP address of Server 1 is in the wrong subnet.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 34

Refer to the exhibit. Which two of the output fields could help you determine if a broadcast storm has occurred? (Choose two.)

FastEthernet0/1 is up, line protocol is up (connected)

.....

(output omitted)

.....

114682 packets input, 8027398 bytes, 0 no buffer
Received 45853 broadcasts (0 multicast)
0 runs, 0 giants, 0 throttles
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
0 watchdog, 45853 multicast, 0 pause input
0 input packets with dribble condition detected
493185 packets output, 36788789 bytes, 0 underruns
0 output errors, 0 collisions, 1 interface resets
0 babbles, 0 late collision, 0 deferred
0 lost carrier, 0 no carrier, 0 PAUSE output
0 output buffer failures, 0 output buffers swapped out

- A. giants
- B. no buffer
- C. collisions
- D. ignored
- E. dribble condition

Correct Answer: BD

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 35

Refer to the exhibit. What does the address 192.168.2.167 represent?

```
Router# copy startup-config tftp
Address or name of remote host []? 192.168.2.167
Destination filename [router-config]?
!!!!!!!
1476 bytes copied in 0.080. secs (5950 bytes/sec)
Router#
```

- A. the TFTP server from which the file startup-config is being transferred
- B. the router from which the file startup-config is being transferred
- C. the TFTP server from which the file router-config is being transferred
- D. the TFTP server to which the file router-config is being transferred
- E. the router to which the file router-config is being transferred
- F. the router to which the file startup-config is being transferred

Correct Answer: D

Section: (none)

Explanation

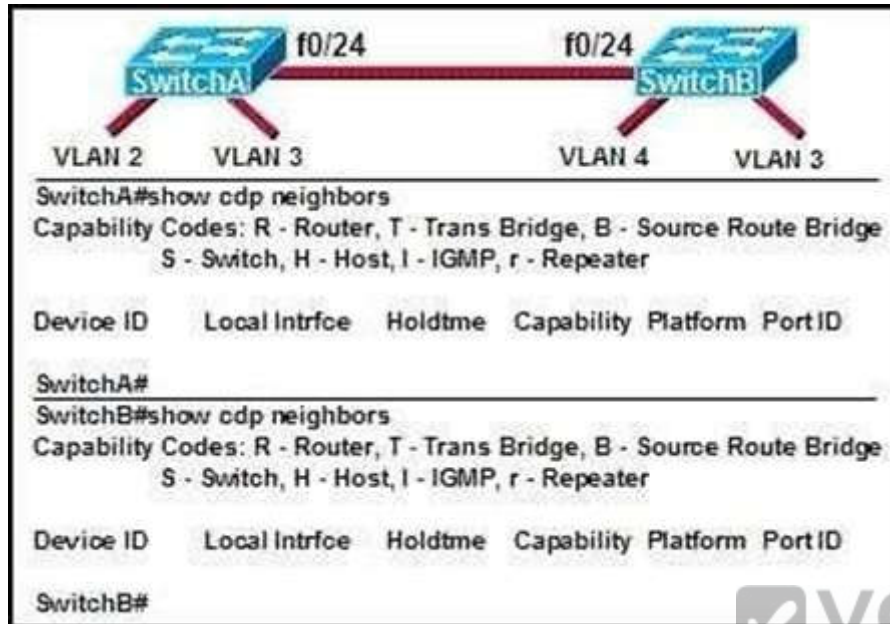
Explanation/Reference:

Explanation:



QUESTION 36

Refer to the exhibit. Two 2950 switches connect through ports fa0/24 using a straight-through cable. Based on the output that is shown in the exhibit and the information that is given, what can be concluded about this network?



- A. STP can not be configured on a FastEthernet ports.
- B. An IP address and default gateway must be configured on each switch.
- C. The switches do not share the same VTP domain.
- D. Port fa0/24 must be configured as a trunk in order for the switches to share neighbor information.
- E. The switches are cabled incorrectly.

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 37

In which situation would the use of a static route be appropriate?

- A. To configure a route to the first Layer 3 device on the network segment.
- B. To configure a route from an ISP router into a corporate network.

- C. To configure a route when the administrative distance of the current routing protocol is too low.
- D. To reach a network is more than 15 hops away.
- E. To provide access to the Internet for enterprise hosts.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 38

What happens when the cable is too long?

- A. Baby Giant
- B. Late collision

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 39

What is the requirement of configuring 6to4 tunnelling on two routers?

- A. Both ipv6 and ipv4 must be configured
- B. Only IPv6
- C. Only IPv4

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 40

Which name describes an IPV6 host-enable tunneling technique that uses IPV4 UDP, does not require dedicated gateway tunnels, and can pass through existing IPV4 NAT gateways?

- A. dual stack XX
- B. dynamic
- C. Teredo
- D. Manual 6to4

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 41

How many primary ipv4 addresses can be assigned on a router interface?

- A. 0
- B. 1
- C. 4
- D. Unlimited

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Cisco IOS software supports multiple IP addresses per interface. You can specify an unlimited number of secondary addresses but only one primary one.

Reference: http://www.cisco.com/c/en/us/td/docs/ios/12_2/ip/configuration/guide/fipr_c/1cfipadr.html

QUESTION 42

Which command is used to build DHCP pool?

- A. ip dhcp conflict
- B. ip dhcp-server pool DHCP
- C. ip dhcp pool DHCP
- D. ip dhcp-client pool DHCP

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 43

You are configuring dynamic NAT on your Cisco IOS router. Which command is used to verify the interfaces that are being used as the outside interface and the inside interface?

- A. show interfaces
- B. show ip route
- C. show ipnat translations
- D. show ip interface brief
- E. show ip interface
- F. show ip nat statistics

Correct Answer: F

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 44

What disables CEF?

- A. RIB
- B. IPv6
- C. Ping
- D. Disable Logging

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 45

What is the default configuration of a Cisco switch?

- A. No default gateway assigned
- B. System name is Cisco

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 46

Which technology allows a large number of private IP addresses to be represented by a smaller number of public IP addresses?

- A. NAT
- B. NTP
- C. RFC 1631
- D. RFC 1918



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 47

Which command can you enter to verify that a 128-bit address is live and responding?

- A. traceroute
- B. telnet
- C. ping
- D. ping ipv6

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 48

Refer to the exhibit. You have discovered that computers on the 192.168.10.0/24 network can ping their default gateway, but they cannot connect to any resources on a remote network. Which reason for the problem is most likely true?

```
R1
interface Loopback0
  ip address 172.16.1.1 255.255.255.255

interface FastEthernet0/0
  ip address 192.168.12.1 255.255.255.0

interface FastEthernet0/1
  ip address 192.168.10.1 255.255.255.0

router ospf 1
  router-id 172.16.1.1
  network 172.16.1.1 0.0.0.0 area 0
  network 192.168.10.0.0.0.255 area 0
```



- A. The 192.168.12.0/24 network is missing from OSPF
- B. The OSPF process ID is incorrect
- C. The OSPF area number is incorrect.
- D. An ARP table entry is missing for 192.168.10.0.
- E. A VLAN number is incorrect for 192.168.10.0.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 49

What is true about ipv6 unique local addresses:

- A. Global id
- B. Public routable
- C. Summarization
- D. Unique prefix

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 50

If three devices are plugged into one port on a switch and two devices are plugged into a different port, how many collision domains are on the switch?

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



Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 51

Which three commands must you enter to create a trunk that allows VLAN 20? (Choose three)

- A. Switch(config-if)#switchport mode dynamic auto
- B. Switch(config-if)#switchport mode trunk
- C. Switch(config-if)#switchport trunk allowed vlan 20
- D. Switch(config-if)#switchport mode dynamic desirable
- E. Switch(config-if)#switchport trunk encapsulation dot1q

F. Switch(config-if)#switchport trunk native vlan 20

Correct Answer: BCE

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 52

Which three options are types of Layer 2 network attack? (Choose three.)

- A. ARP attacks
- B. brute force attacks
- C. spoofing attacks
- D. DDOS attacks
- E. VLAN hopping
- F. botnet attacks

Correct Answer: ACE

Section: (none)

Explanation

Explanation/Reference:

Explanation

QUESTION 53

How does a router handle an incoming packet whose destination network is missing from the Routing table?

- A. it discards the packet.
- B. it broadcasts the packet to each network on the router.
- C. it routes the packet to the default route.
- D. it broadcasts the packet to each interface on the router.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 54

Which feature facilitates the tagging of frames on a specific VLAN?

- A. Routing
- B. hairpinning
- C. switching
- D. encapsulation

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 55

When you troubleshoot an IPv4 connectivity issue on a router, which three router configuration checks you must perform? (Choose three)

- A. Verify that the router interface IP address IP address is correct.
- B. Verify that the DNS is configured correctly.
- C. Verify that the router and the host use the same subnet mask.
- D. Verify that the router firmware is up-to-date.
- E. Verify that a default route is configured.
- F. Verify that the route appears in the Routing table

Correct Answer: ACF

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 56

Which two statements about unique local IPv6 addresses are true? (Choose two)

- A. They are identical to IPv4 private addresses.
- B. They are defined by RFC 1884.

- C. They use the prefix FEC0::/10
- D. They use the prefix FC00::/7
- E. They can be routed on the IPv6 global internet.

Correct Answer: AD

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 57

Which header field is new in IPv6?

- A. Hop Limit
- B. Flow Label
- C. Version
- D. Traffic Class

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 58

Instructions

This item contains several questions that you must answer. You can view these questions by clicking on the corresponding button to the left. Changing questions can be accomplished by clicking the numbers to the left of each question. In order to complete the questions, you will need to refer to the topology.

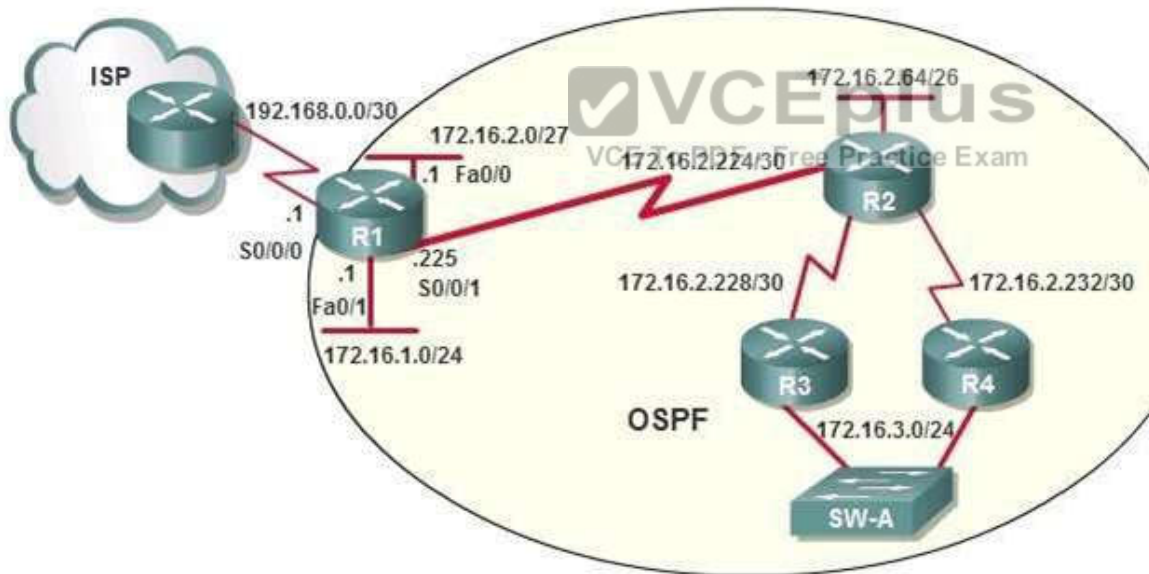
To gain access to the topology, click on the topology button at the bottom of the screen. When you have finished viewing the topology, you can return to your questions by clicking on the Questions button to the left.

Each of the windows can be minimized by clicking on the [-]. You can also reposition a window by dragging it by the title bar.

Topology

Scenario

Refer to the
on the Ques



To allow or prevent load balancing to network 172.16.3.0/24, which of the following commands could be used in R2? (Choose two.)

A. R2(config-if)#clock rate

- B. R2(config-if)#bandwidth
- C. R2(config-if)#ip ospf cost
- D. R2(config-if)#ip ospf priority
- E. R2(config-router)#distance ospf

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

Explanation:

http://www.cisco.com/en/US/tech/tk365/technologies_white_paper09186a0080094e9e.shtml#t6

The cost (also called metric) of an interface in OSPF is an indication of the overhead required to send packets across a certain interface. The cost of an interface is inversely proportional to the bandwidth of that interface. A higher bandwidth indicates a lower cost. There is more overhead (higher cost) and time delays involved in crossing a 56k serial line than crossing a 10M Ethernet line. The formula used to calculate the cost is:

Cost = 10000 0000/bandwidth in bps

For example, it will cost 10 EXP8/10 EXP7 = 10 to cross a 10M Ethernet line and will cost 10 EXP8/1544000 =64 to cross a T1 line.

By default, the cost of an interface is calculated based on the bandwidth; you can force the cost of an interface with the ip ospf cost <value> interface subconfiguration mode command.

QUESTION 59

After the network has converged, what type of messaging, if any, occurs between R3 and R4?

Instructions

This item contains several questions that you must answer. You can view these questions by clicking on the corresponding button to the left. Changing questions can be accomplished by clicking the numbers to the left of each question. In order to complete the questions, you will need to refer to the topology.

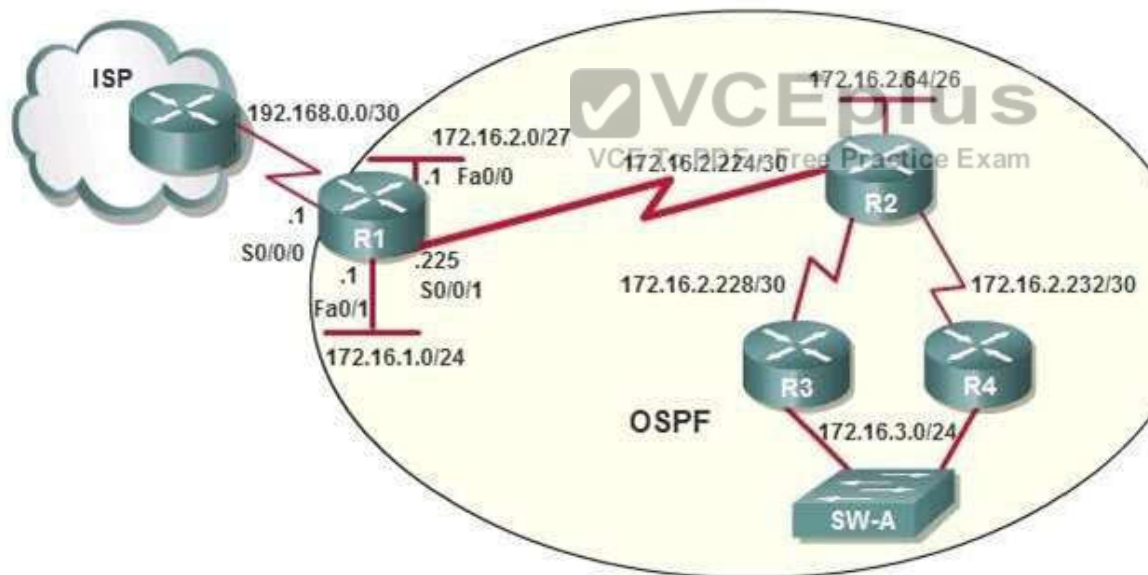
To gain access to the topology, click on the topology button at the bottom of the screen. When you have finished viewing the topology, you can return to your questions by clicking on the Questions button to the left.

Each of the windows can be minimized by clicking on the [-]. You can also reposition a window by dragging it by the title bar.

Topology

Scenario

Refer to the
on the Ques



- A. No messages are exchanged
- B. Hellos are sent every 10 seconds.
- C. The full database from each router is sent every 30 seconds.

D. The routing table from each router is sent every 60 seconds.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

HELLO messages are used to maintain adjacent neighbors so even when the network is converged, hellos are still exchanged. On broadcast and point-to-point links, the default is 10 seconds, on NBMA the default is 30 seconds.

Although OSPF is a link-state protocol but the full database from each router is sent every 30 minutes (not seconds) -> C and D are not correct.

QUESTION 60

OSPF is configured using default classful addressing. With all routers and interfaces operational, how many networks will be in the routing table of R1 that are indicated to be learned by OSPF?

Instructions

This item contains several questions that you must answer. You can view these questions by clicking on the corresponding button to the left. Changing questions can be accomplished by clicking the numbers to the left of each question. In order to complete the questions, you will need to refer to the topology.

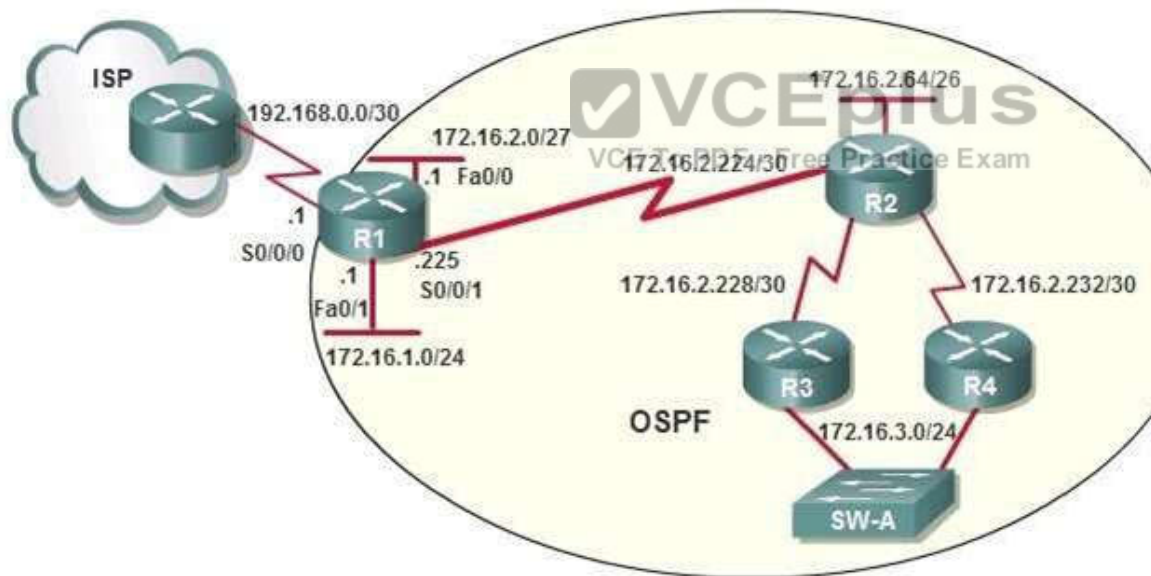
To gain access to the topology, click on the topology button at the bottom of the screen. When you have finished viewing the topology, you can return to your questions by clicking on the Questions button to the left.

Each of the windows can be minimized by clicking on the [-]. You can also reposition a window by dragging it by the title bar.

Topology

Scenario

Refer to the
on the Ques



- A. 2
- B. 3
- C. 4

- D. 5
- E. 6
- F. 7

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 61

R1 is configured with the default configuration of OSPF. From the following list of IP addresses configured on R1, which address will the OSPF process select as the router ID?

Instructions

This item contains several questions that you must answer. You can view these questions by clicking on the corresponding button to the left. Changing questions can be accomplished by clicking the numbers to the left of each question. In order to complete the questions, you will need to refer to the topology.

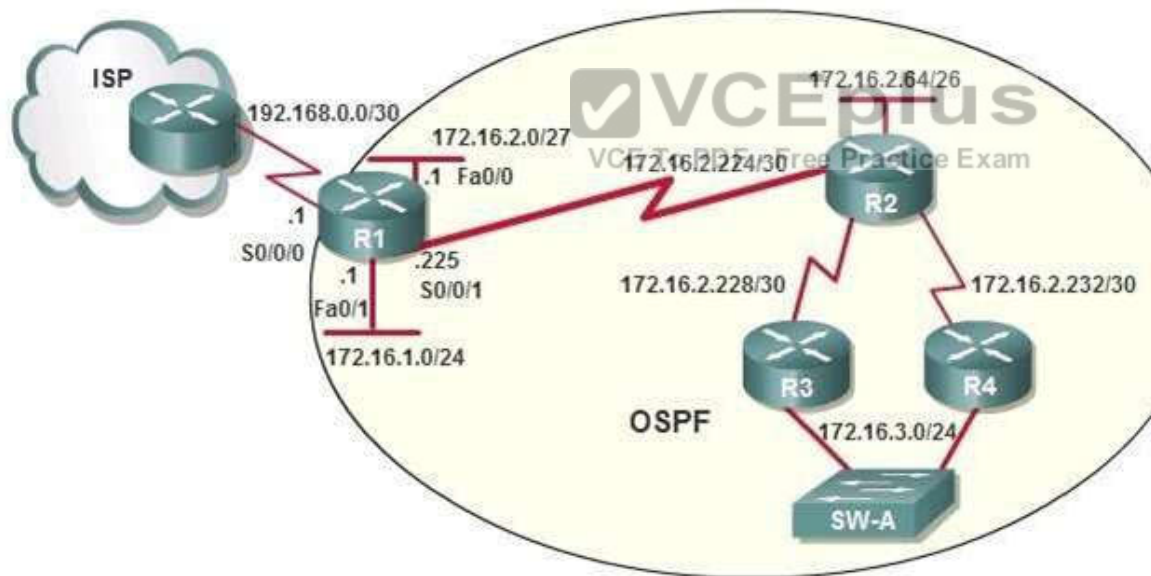
To gain access to the topology, click on the topology button at the bottom of the screen. When you have finished viewing the topology, you can return to your questions by clicking on the Questions button to the left.

Each of the windows can be minimized by clicking on the [-]. You can also reposition a window by dragging it by the title bar.

Topology

Scenario

Refer to the
on the Ques



- A. 192.168.0.1
- B. 172.16.1.1
- C. 172.16.2.1

D. 172.16.2.225

Correct Answer: A

Section: (none)

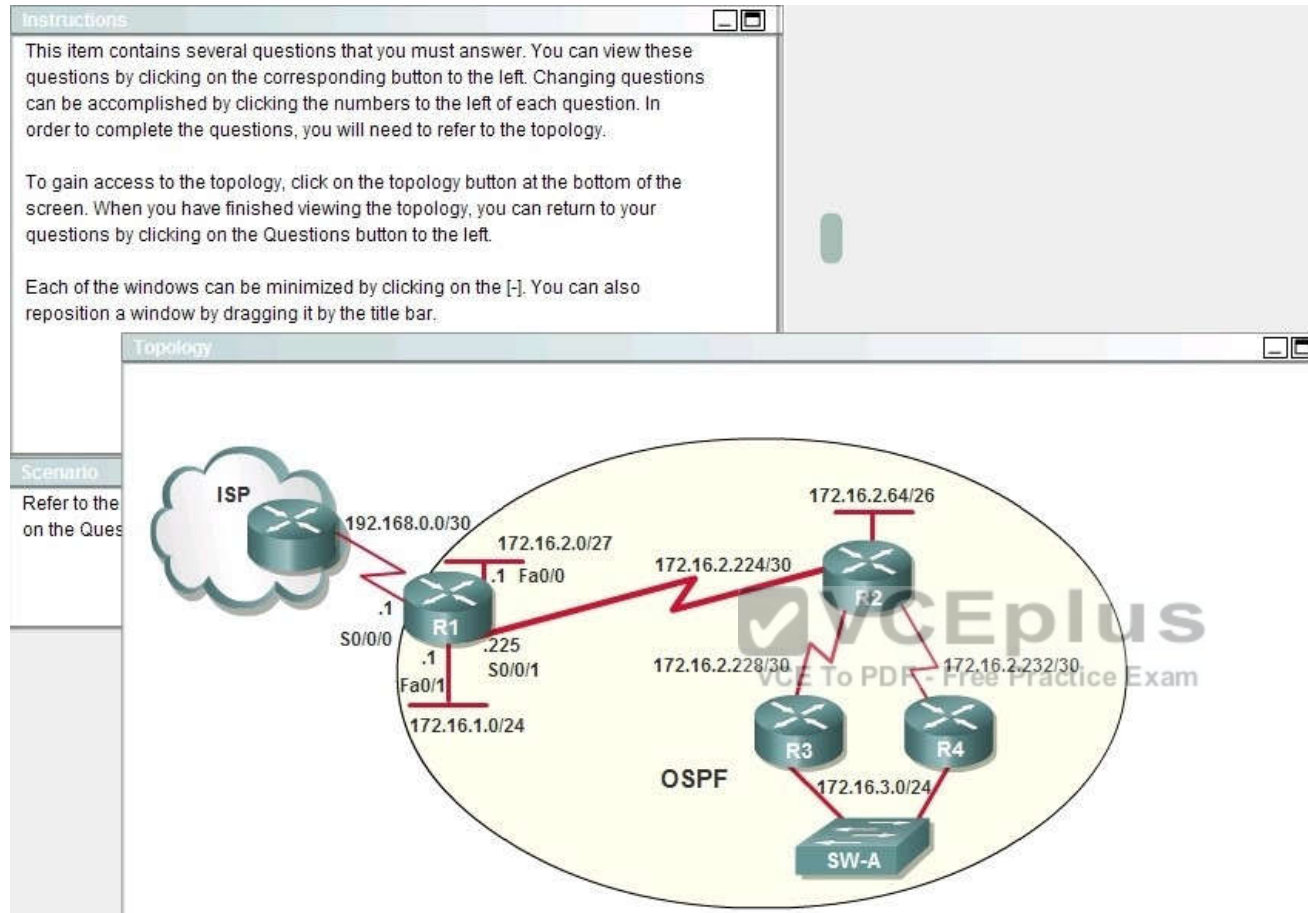
Explanation

Explanation/Reference:

Explanation:

QUESTION 62

R1 is unable to establish an OSPF neighbor relationship with R3. What are possible reasons for this problem? (Choose two)



- A. All of the routers need to be configured for backbone Area 1.
- B. R1 and R2 are the DR and BDR, so OSPF will not establish neighbor adjacency with R3.
- C. A static route has been configured from R1 to R3 and prevents the neighbor adjacency from being established.
- D. The hello and dead interval timers are not set to the same values on R1 and R3.
- E. EIGRP is also configured on these routers with a lower administrative distance.
- F. R1 and R3 are configured in different areas.

Correct Answer: DF

Section: (none)

Explanation**Explanation/Reference:**

Explanation:

To become OSPF neighbors, routers must meet these requirements: Hello interval, Dead interval and AREA number -> D and F are correct.

QUESTION 63**DRAG DROP**

This topology contains 3 routers and 1 switch. Complete the topology.

Drag the appropriate device icons to the labeled Device

Drag the appropriate connections to the locations labeled Connections. Drag the appropriate IP addresses to the locations labeled IP address

(Hint: use the given host addresses and Main router information) To remove a device or connection, drag it away from the topology.

Use information gathered from the Main router to complete the configuration of any additional routers. No passwords are required to access the Main router. The config terminal command has been disabled for the HQ router. The router does not require any configuration.

Configure each additional router with the following:

Configure the interfaces with the correct IP address and enable the interfaces. Set the password to allow console access to consolepw

Set the password to allow telnet access to telnetpw

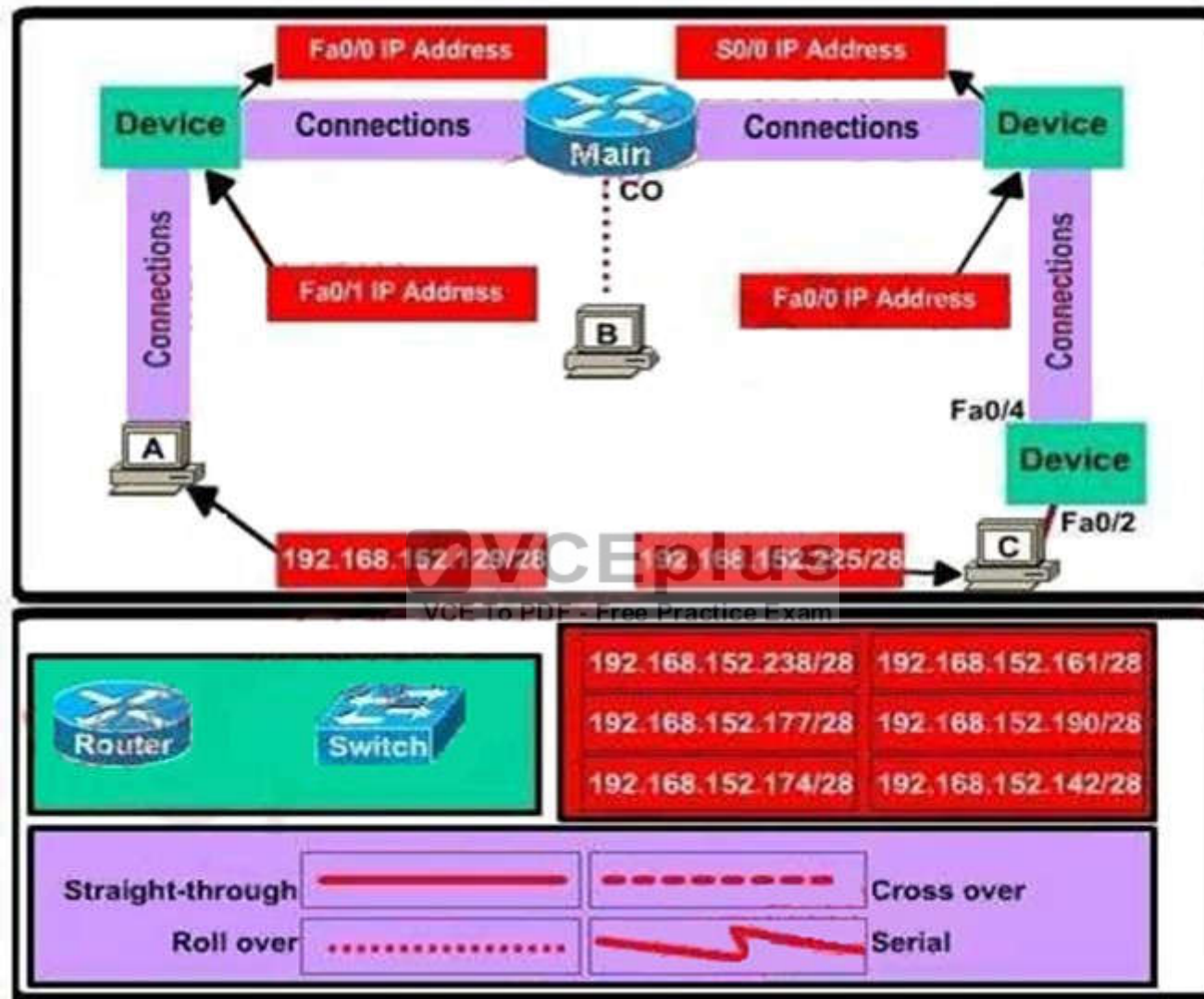
Set the password to allow privilege mode access to privpw

Note: Because routes are not being added to the configurations, you will not be able to ping through the internetwork.

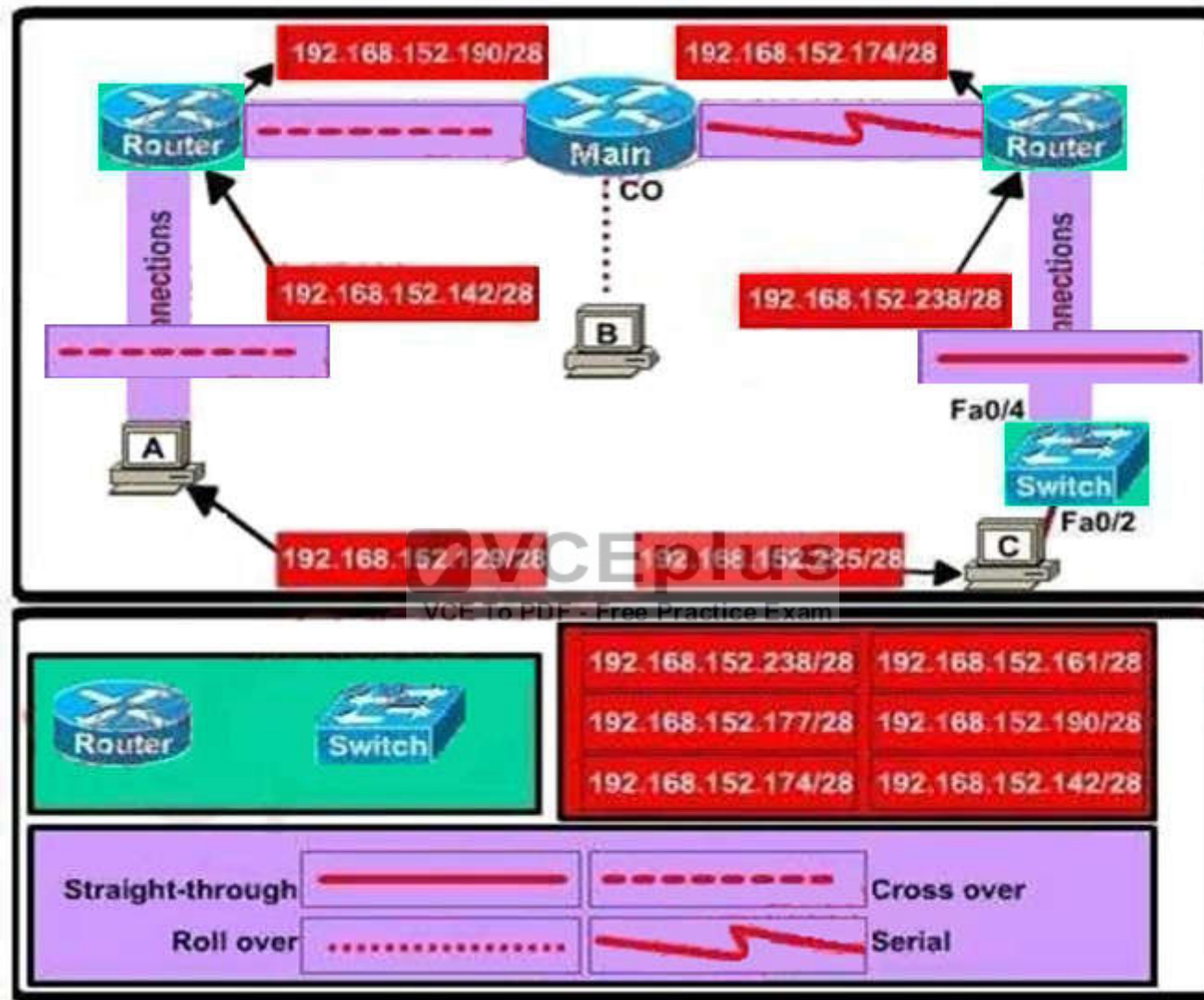
All devices have cable autosensing capabilities disabled.

All hosts are PC's

Select and Place:



Correct Answer:



Section: (none)

Explanation

Explanation/Reference:

Explanation:

(1) Configure two routers on the left and right with these commands:

Router1 = router on the left

(2) Assign appropriate IP addresses to Fa0/0 & Fa0/1 interfaces:

```
Router1>enable
Router1#configure terminal
Router1(config)#interface fa0/0
Router1(config-if)#ip address 192.168.152.190 255.255.255.240
Router1(config-if)#no shutdown
```

```
Router1(config-if)#interface fa0/1
Router1(config-if)#ip address 192.168.152.142 255.255.255.240
Router1(config-if)#no shutdown
```

(3) Set passwords (configure on two routers)

+ Console password:

```
Router1(config-if)#exit Router1(config)#line console 0 Router1(config-line)#password consolepw Router1(config-line)#login Router1(config-line)#exit
```

+ Telnet password:

```
Router1(config)#line vty 0 4
Router1(config-line)#password telnetpw
Router1(config-line)#login
```

```
Router1(config-line)#exit
```

+ Privilege mode password:

```
Router1(config)#enable password privpw
```

Save the configuration:

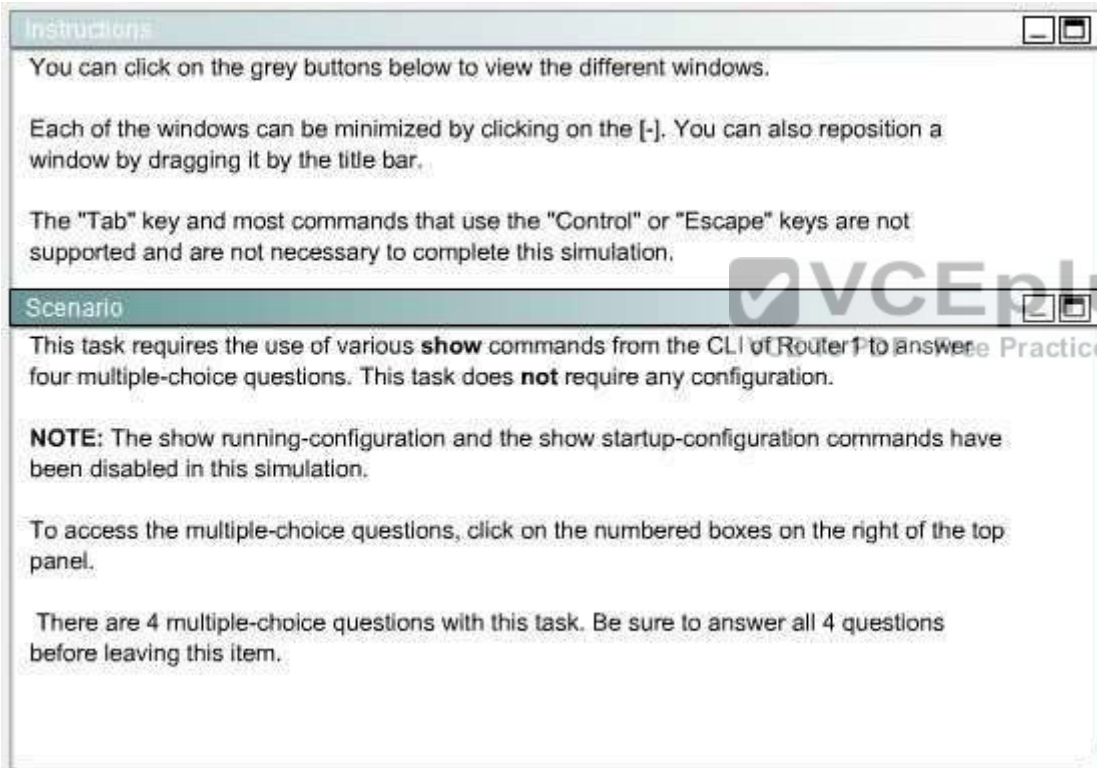
```
Router1(config)#exit
Router1#copy running-config startup-config
```

(4) Configure IP addresses of Router2 (router on the right)

```
Router2>enable
Router2#configure terminal
Router2(config)#interface fa0/0
Router2(config-if)#ip address 192.168.152.238 255.255.255.240
Router2(config-if)#no shutdown
```

```
Router2(config-if)#interface serial0/0
Router2(config-if)#ip address 192.168.152.174 255.255.255.240
Router2(config-if)#no shutdown
```

QUESTION 64



Instructions

You can click on the grey buttons below to view the different windows.

Each of the windows can be minimized by clicking on the [-]. You can also reposition a window by dragging it by the title bar.

The "Tab" key and most commands that use the "Control" or "Escape" keys are not supported and are not necessary to complete this simulation.

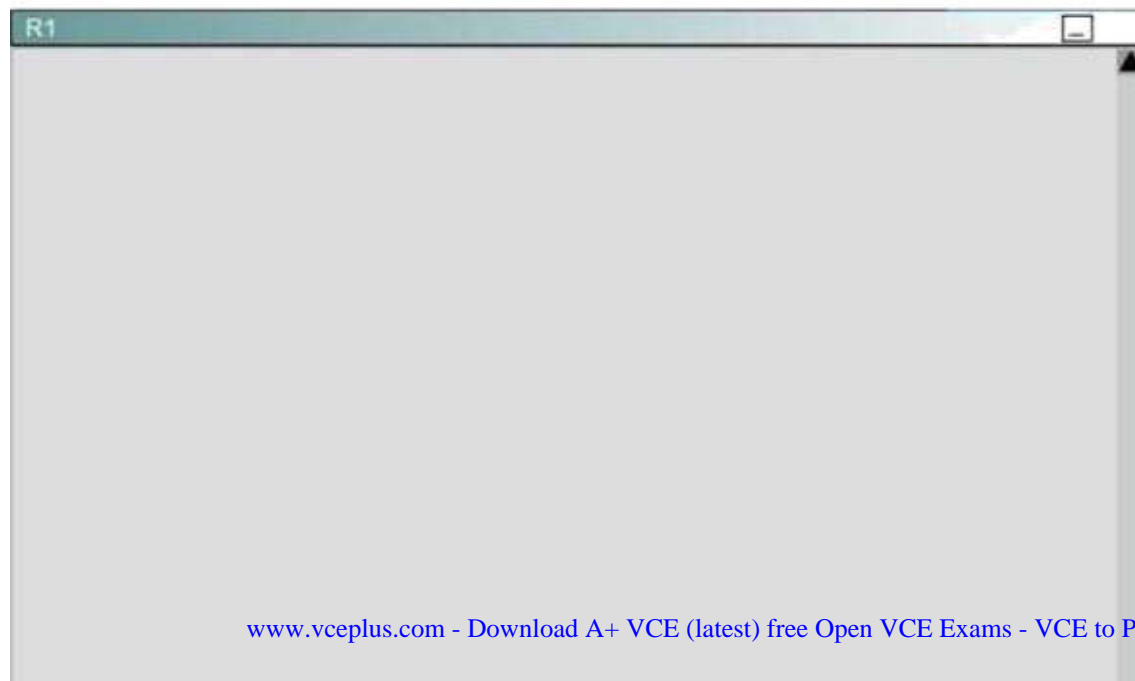
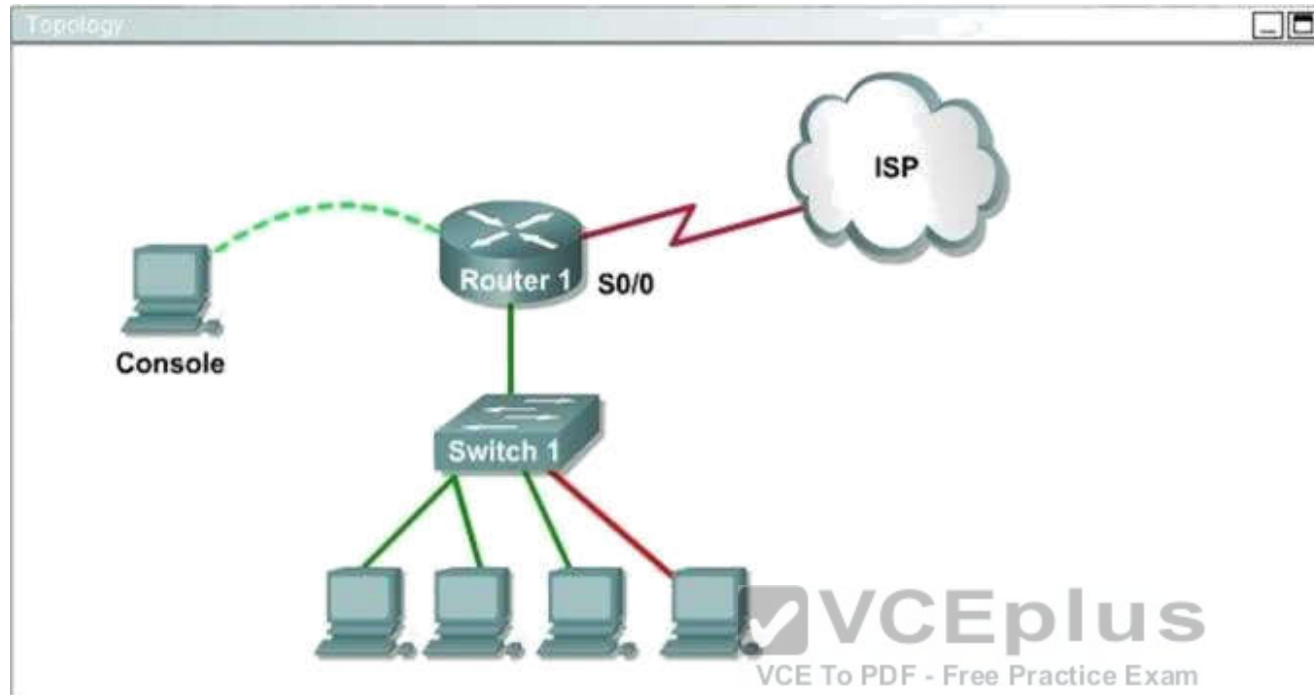
Scenario

This task requires the use of various **show** commands from the CLI of Router1 to answer four multiple-choice questions. This task does **not** require any configuration.

NOTE: The show running-configuration and the show startup-configuration commands have been disabled in this simulation.

To access the multiple-choice questions, click on the numbered boxes on the right of the top panel.

There are 4 multiple-choice questions with this task. Be sure to answer all 4 questions before leaving this item.



What is the subnet broadcast address of the LAN connected to Router1?

- A. 192.168.8.15
- B. 192.168.8.31
- C. 192.168.8.63
- D. 192.168.8.127

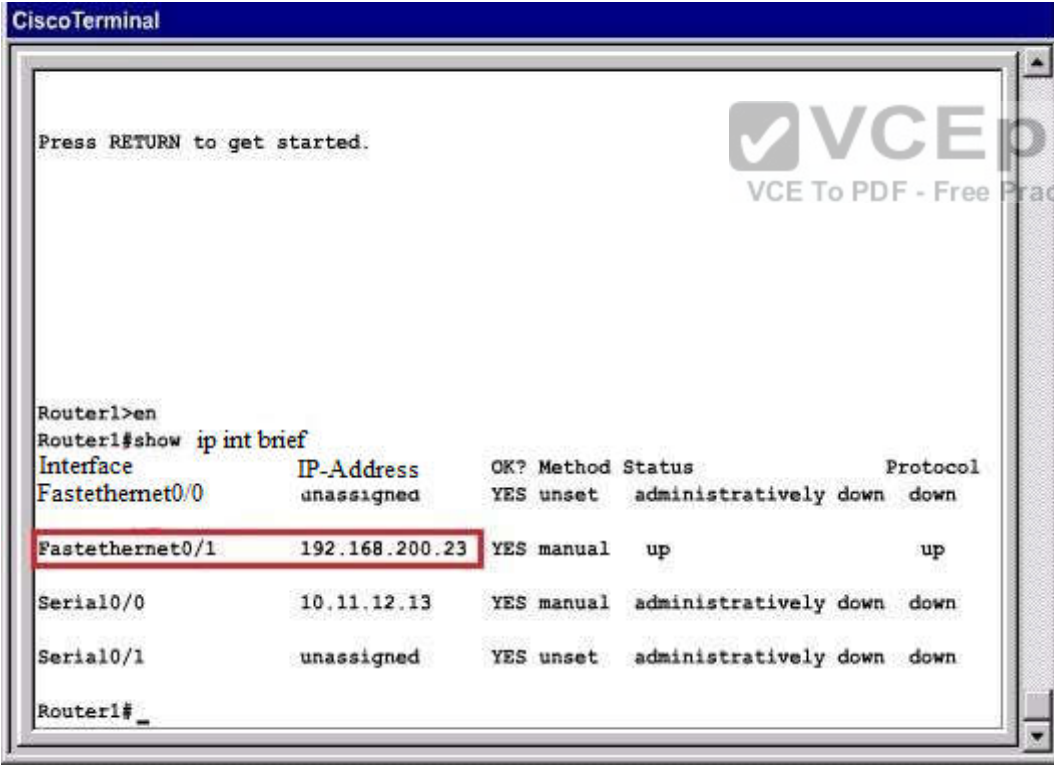
Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:



```
CiscoTerminal

Press RETURN to get started.

Router1>en
Router1#show ip int brief
Interface      IP-Address      OK? Method Status                Protocol
FastEthernet0/0 unassigned      YES unset  administratively down  down
FastEthernet0/1 192.168.200.23  YES manual    up                      up
Serial0/0       10.11.12.13     YES manual  administratively down  down
Serial0/1       unassigned      YES unset  administratively down  down
Router1#
```

User the "show interface fa0/1" command

```
CiscoTerminal
Router1#show int fa0/1
FastEthernet0/1 is Up, line protocol is Up
  Hardware is Lance, address is 0010.7b81.4e2d(bia 0010.7b81.4e2d)
  Internet address is 192.168.200.23/28
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Full-duplex, 100Mb/s, 100BaseTX/FX
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input 00:00:27, output 00:00:02, output hang never
  Last clearing of "show interface" counters never
  Queueing strategy: fifo
    output queue 0/40, 0 drops ; input queue 0/75, 0 drops
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
    3581 packets input, 1202219 bytes, 0 no buffer
      Received 3581 broadcasts, 0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored, 0 abort
    0 input packets with dribble condition detected
  24213 packets output, 2101260 bytes, 0 underruns
    0 output errors, 0 collisions, 12 interface resets
    0 babbles, 0 late collision, 0 deferred
--More--
```

QUESTION 65

Instructions

You can click on the grey buttons below to view the different windows.

Each of the windows can be minimized by clicking on the [-]. You can also reposition a window by dragging it by the title bar.

The "Tab" key and most commands that use the "Control" or "Escape" keys are not supported and are not necessary to complete this simulation.

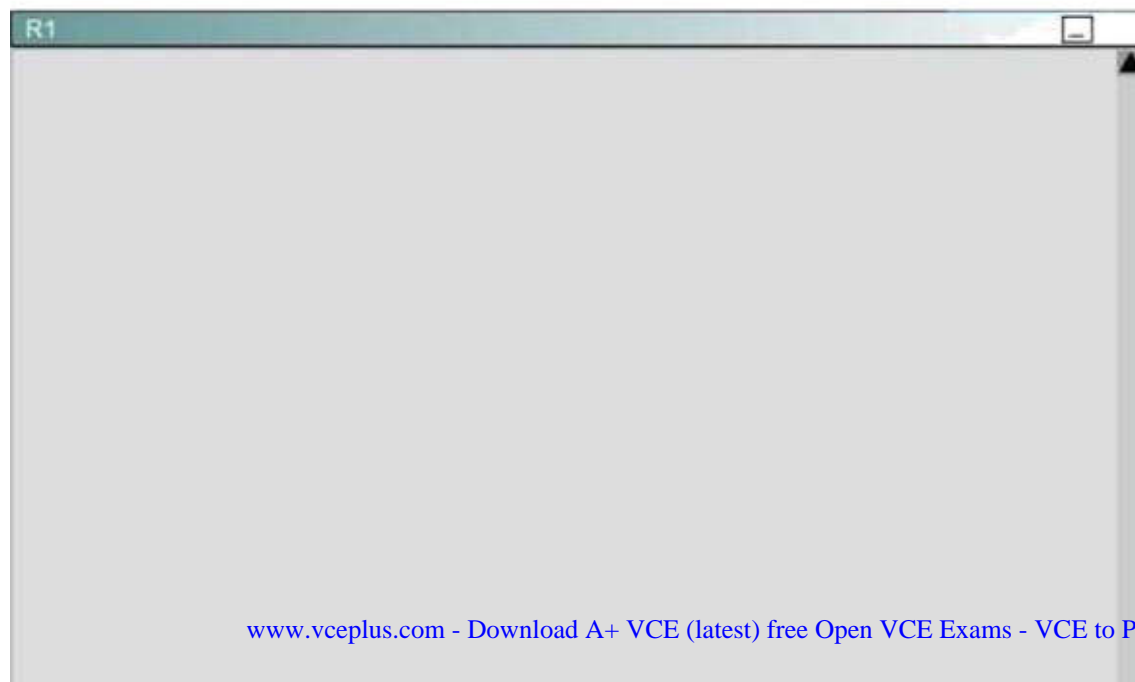
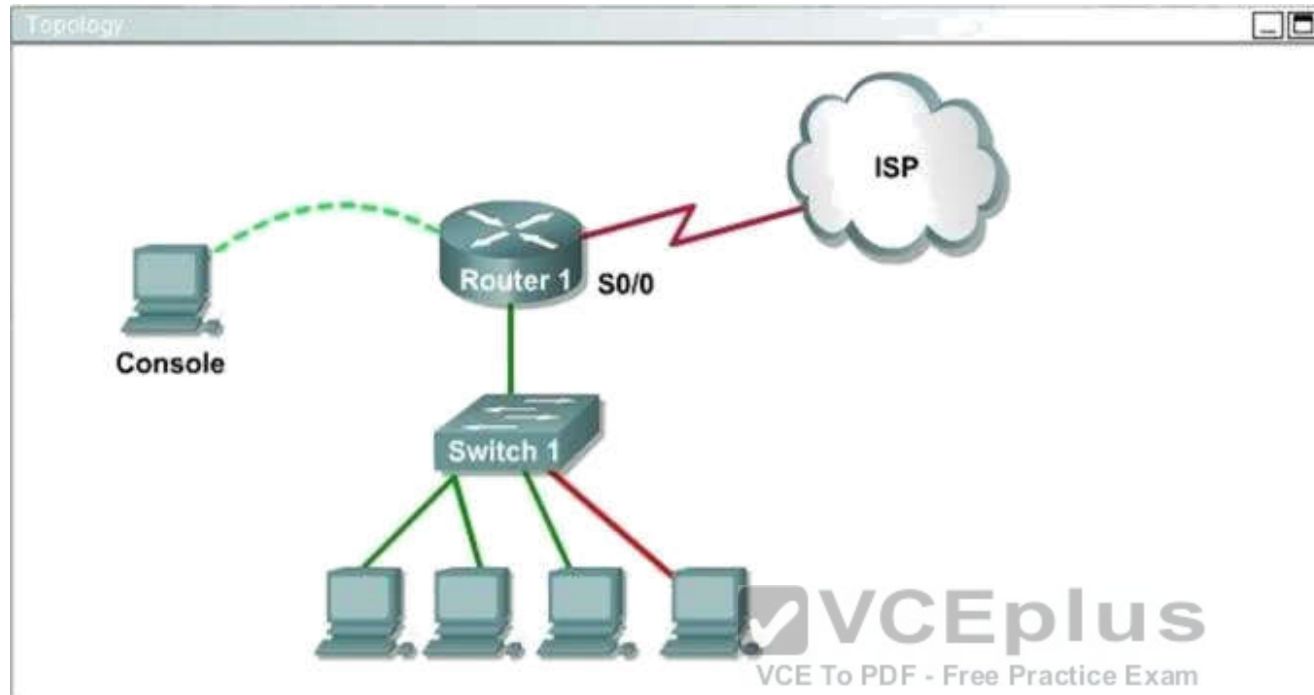
Scenario

This task requires the use of various **show** commands from the CLI of Router1 to answer four multiple-choice questions. This task does **not** require any configuration.

NOTE: The show running-configuration and the show startup-configuration commands have been disabled in this simulation.

To access the multiple-choice questions, click on the numbered boxes on the right of the top panel.

There are 4 multiple-choice questions with this task. Be sure to answer all 4 questions before leaving this item.



What is the bandwidth on the WAN interface of Router1?

- A. 16 Kbit/sec
- B. 32 Kbit/sec
- C. 64 Kbit/sec
- D. 128 Kbit/sec
- E. 512 Kbit/sec
- F. 1544 Kbit/sec

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 66

DRAG DROP

Drag and drop the extended traceout option from the left onto the correct description on the right.

Select and Place:

Answer Area

maximum time to live	A value that, when reached, terminates the traceroute command.
minimum time to live	IP header options.
numeric display	Overrides the router's selection of an outbound interface.
source address	Sets the interval for which the probe will wait for a response.
timeout	Suppresses the display of known hops.
timestamp, verbose	Suppresses the display of hostnames.

Correct Answer:

Answer Area

	maximum time to live
	timestamp, verbose
	source address
	timeout
	minimum time to live
	numeric display

Section: (none)

Explanation

Explanation/Reference:

QUESTION 67

Instructions

You can click on the grey buttons below to view the different windows.

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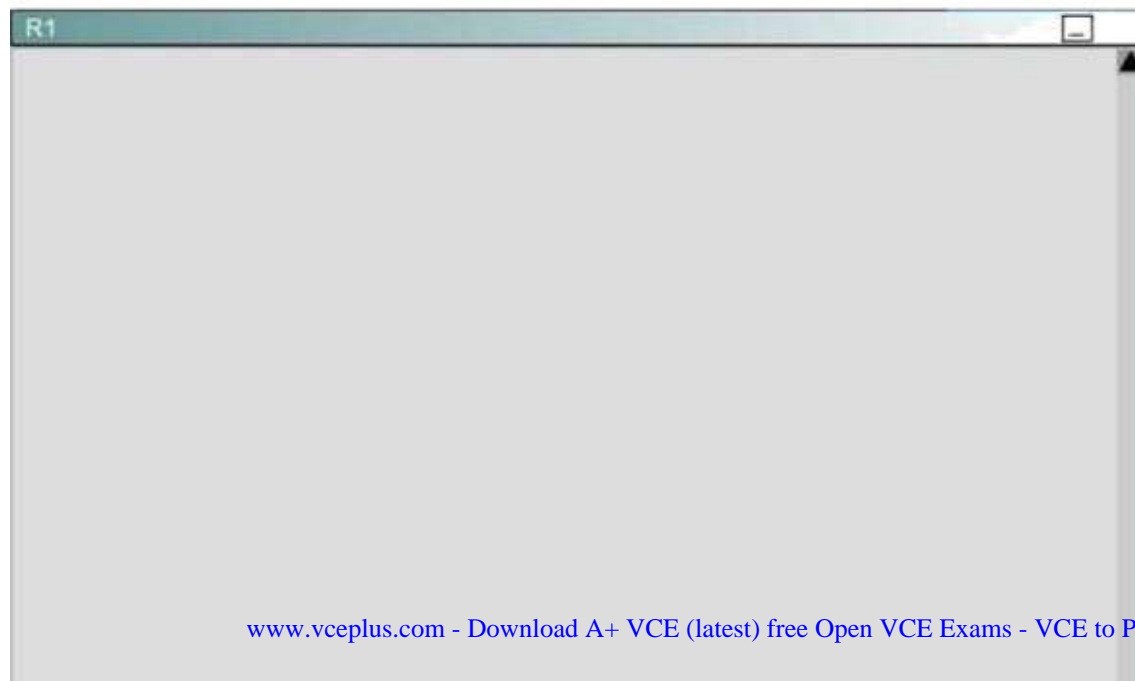
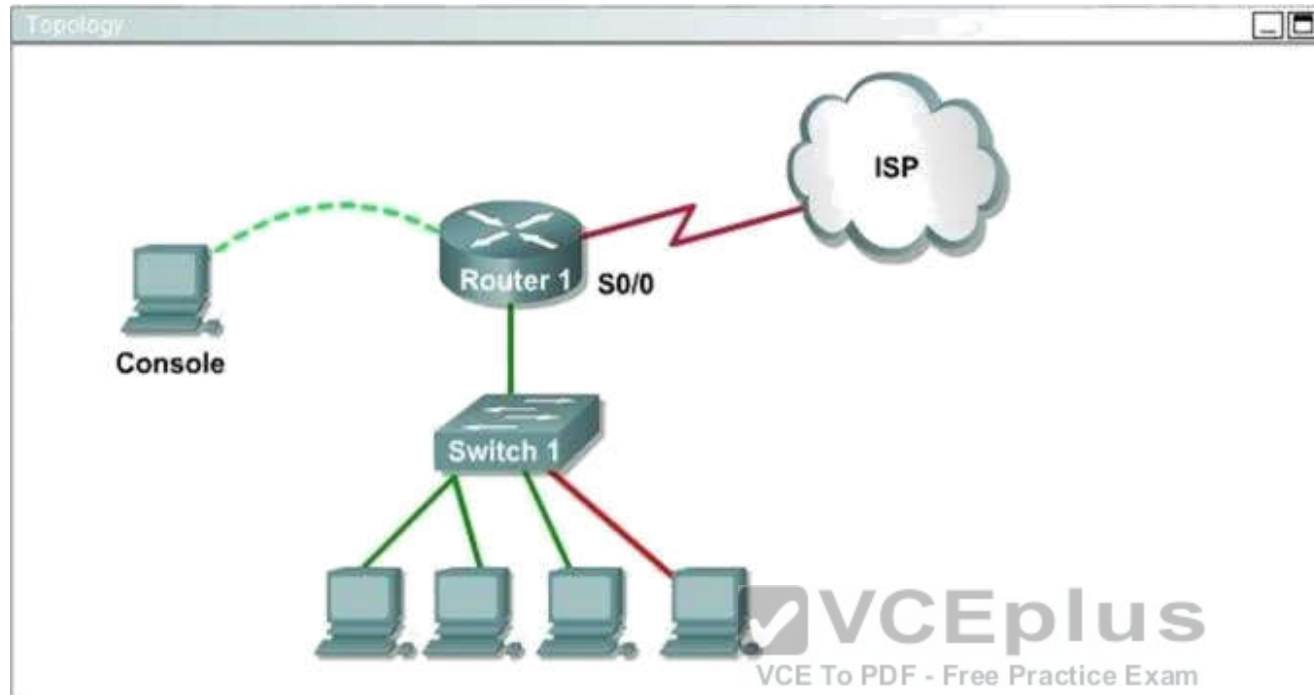
Scenario

This task requires the use of various **show** commands from the CLI of Router1 to answer four multiple-choice questions. This task does **not** require any configuration.

NOTE: The show running-configuration and the show startup-configuration commands have been disabled in this simulation.

To access the multiple-choice questions, click on the numbered boxes on the right of the top panel.

There are 4 multiple-choice questions with this task. Be sure to answer all 4 questions before leaving this item.



Question 4

The hosts in the LAN are not able to connect to the Internet. Which commands will correct this issue?

- ☐ Router1(conf)# interface fa0/0
Router1(conf-if)# no shutdown
- ☐ Router1(conf)# interface fa0/1
Router1(conf-if)# no shutdown
- ☐ Router1(conf)# interface s0/0
Router1(conf-if)# no shutdown
- ☐ Router1(conf)# interface s0/1
Router1(conf-if)# no shutdown
- ☐ Router1(conf)# interface s0/0
Router1(conf-if)# ip address 10.11.12.13 255.255.255.252
- ☐ Router1(conf)# interface s0/1
Router1(conf-if)# ip address 10.100.1.1255.255.255.252

The hosts in the LAN are not able to connect to the Internet. Which commands will correct this issue?

- A. Router1(conf)#interface fa0/0
Router1(conf-if)# no shutdown
- B. Router1(conf)#interface fa0/1
Router1(conf-if)# no shutdown
- C. Router1(conf)#interface s0/0
Router1(conf-if)# no shutdown
- D. Router1(conf)#interface s0/1
Router1(conf-if)# no shutdown
- E. Router1(conf)#interface s0/0
Router1(conf-if)# ip address 10.11.12.13 255.255.255.252
- F. Router1(conf)#interface s0/1
Router1(conf-if)# ip address 10.100.1. 1255.255.255.252

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

User the "show ip interface brief" command

```

CiscoTerminal

Press RETURN to get started.

Router1>en
Router1#show ip int brief
Interface          IP-Address      OK? Method Status Protocol
FastEthernet0/0    unassigned      YES unset  administratively down down
FastEthernet0/1    192.168.200.23 YES manual    up        up
Serial0/0          10.11.12.13    YES manual  administratively down down
Serial0/1          unassigned      YES unset  administratively down down
Router1#
  
```

From the output, we learn that the status of Serial0/0 interface which connects to ISP router is currently "administratively down". This status indicates this interface is shutting down so we need to turn it on.

QUESTION 68

SIMULATION

Instructions

To configure the router (**Gotha**) click on the console host icon that is connected to a router by a serial console cable (shown in the diagram as a dashed black line).

You can click on the buttons below to view the different windows.

Each of the windows can be minimized by clicking on the [-]. You can also reposition a window by dragging it by the title bar.

The “Tab” key and most commands that use the “Control” or “Escape” keys are not supported and are not necessary to complete this simulation. The **help** command does not display all commands of the help system.

Scenario

Central Florida Widgets recently installed a new router in their Gotha office. Complete the network installation by performing the initial router configurations and configuring RIPv2 routing using the router command line interface (CLI) on the Gotha router.

Configure the router per the following requirements:

Name of the router is **Gotha**

Enable-secret password is **mi222ke**

The password access user EXEC mode using the console is **G8tors1**

The password to allow telnet access to the router is **dun63ap**

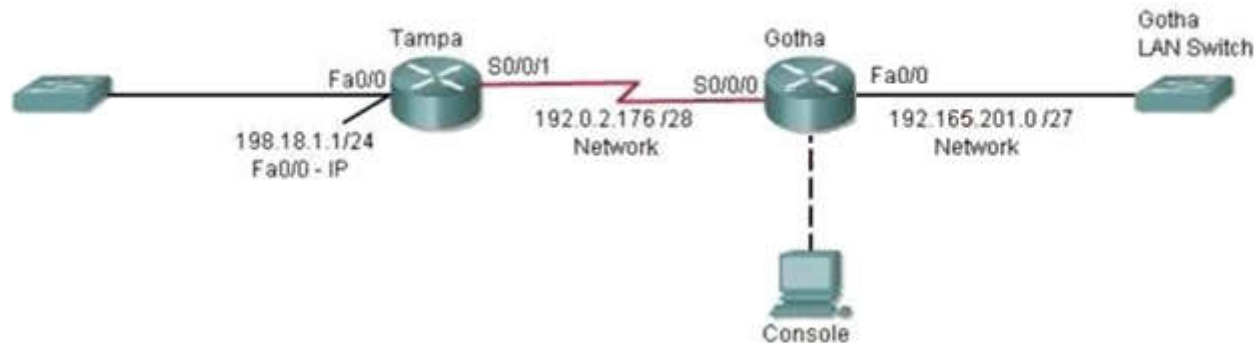
IPv4 addresses must be configured as follows:

Ethernet network **209.165.201.0/27** – router has **fourth** assignable host address in subnet.

Serial network is **192.0.2.176/28** – router has **last** assignable host address in the subnet.

Interface should be enabled.

Routing protocol is **RIPv2**.



Attention:

In practical examinations, please note the following, the actual information will prevail.

1. Name of the router is xxx
2. Enable. secret password is xxx
3. Password In access user EXEC mode using the console is xxx
4. The password to allow telnet access to the router is xxx
5. IP information

Correct Answer: See explanation

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Router>enable

Router#config terminal

Router(config)#hostname Gotha

2) Enable-secret password (cisco10):

Gotha(config)#enable secret mi222ke

3) Set the console password to G8tors1:

Gotha(config)#line console 0

Gotha(config-line)#password G8tors1

Gotha(config-line)#login

Gotha(config-line)#exit

4) Set the Telnet password to dun63lap:

Gotha(config)#line vty 0 4

Gotha(config-line)#password dun63lap

Gotha(config-line)#login

Gotha(config-line)#exit

5) Configure Ethernet interface (on the right) of router Gotha:

Ethernet network 209.165.201.0 /27 - Router has the fourth assignable host address in subnet.

Ethernet Interface on router R2 is Fast Ethernet 0/0 as per the exhibit

First we need to identify the subnet mask

Network: 209.165.201.0 /27

Subnet mask: /27: 27 bits = 8 + 8 + 8 + 3

$=8(\text{bits}).8(\text{bits}).8(\text{bits}).11100000$ (3bits)
 $=255.255.255.11100000$
 $=11100000 = 128+64+32+0+0+0+0+0$
 $= 224$

Subnet mask: 255.255.255.224

Different subnet networks and there valid first and last assignable host address range for above subnet mask are

Subnet Networks :::: Valid Host address range :::: Broadcast address

209.165.201.0 :::: 209.165.201.1 - 209.165.201.30 :::: 209.165.201.31

209.165.201.32 :::: 209.165.201.33 - 209.165.201.62 :::: 209.165.201.63

209.165.201.64 :::: 209.165.201.65 - 209.165.201.94 :::: 209.165.201.95

209.165.201.96 :::: 209.165.201.97 - 209.165.201.126 :::: 209.165.201.127

209.165.201.128 :::: 209.165.201.129 - 209.165.201.158 :::: 209.165.201.159

209.165.201.160 :::: 209.165.201.161 - 209.165.201.190 :::: 209.165.201.191

209.165.201.192 :::: 209.165.201.193 - 209.165.201.222 :::: 209.165.201.223

209.165.201.224 :::: 209.165.201.225 - 209.165.201.254 :::: 209.165.201.255 Use above table information for network 209.165.201.0 /27 to identify First assignable host address: 209.165.201.1

Last assignable host address: 209.165.201.30

Fourth assignable host address: 209.165.201.4

Assign the fourth assignable host address to Fa0/0 interface of Gotha router:

Gotha(config)#interface Fa0/0

Gotha(config-if)#ip address 209.165.201.4 255.255.255.224

Gotha(config-if)#no shutdown

Gotha(config-if)#exit

6) Configure Serial interface (on the left) of router Gotha:

Serial Network is 192.0.2.176 /28 - Router has the last assignable host address in subnet.

Serial Interface on R2 is Serial 0/0/0 as per the exhibit

First we need to identify the subnet mask

Network: 192.0.2.176 /28

Subnet mask: /28: 28bits = 8bits+8bits+8bits+4bits

$=8(\text{bits}).8(\text{bits}).8(\text{bits}).11110000$ (4bits)

$=255.255.255.11100000$

$=11100000 = 128+64+32+16+0+0+0+0$

$= 240$

Subnet mask: 255.255.255.240

Different subnet networks and there valid first and last assignable host address range for above subnet mask are

Subnet Networks :::: Valid Host address :::: Broadcast address

192.0.2.0 :::: 192.0.2.1 - 192.0.2.14 :::: 192.0.2.15

192.0.2.16 :::: 192.0.2.17 - 192.0.2.30 :::: 192.0.2.31

192.0.2.32 :::: 192.0.2.33 - 192.0.2.46 :::: 192.0.2.47

192.0.2.48 192.0.2.49 - 192.0.2.62 192.0.2.64
192.0.2.64 192.0.2.65 - 192.0.2.78 192.0.2.79

192.0.2.80 192.0.2.81 - 192.0.2.94 192.0.2.95
192.0.2.96 192.0.2.97 - 192.0.2.110 192.0.2.111
192.0.2.112 192.0.2.113 - 192.0.2.126 192.0.2.127
192.0.2.128 192.0.2.129 - 192.0.2.142 192.0.2.143
192.0.2.144 192.0.2.145 - 192.0.2.158 192.0.2.159
192.0.2.160 192.0.2.161 - 192.0.2.174 192.0.2.175
192.0.2.176 192.0.2.177 - 192.0.2.190 192.0.2.191 and so on

Use above table information for network 192.0.2.176 /28 to identify

First assignable host address: 192.0.2.177

Last assignable host address: 192.0.2.190

We need to configure Last assignable host address (192.0.2.190) on serial 0/0/0 using the subnet mask 255.255.255.240

Assign the last assignable host address to S0/0/0 interface of Gotha router:

Gotha(config)#interface S0/0/0 (or use interface S0/0 if not successful)

Gotha(config-if)#ip address 192.0.2.190 255.255.255.240

Gotha(config-if)#no shutdown

Gotha(config-if)#exit



7) Configure RIP v2 routing protocol:

Gotha(config)#router rip Gotha(config-router)#version 2 Gotha(config-router)#network 209.165.201.0 Gotha(config-router)#network 192.0.2.176 Gotha(config-router)#end

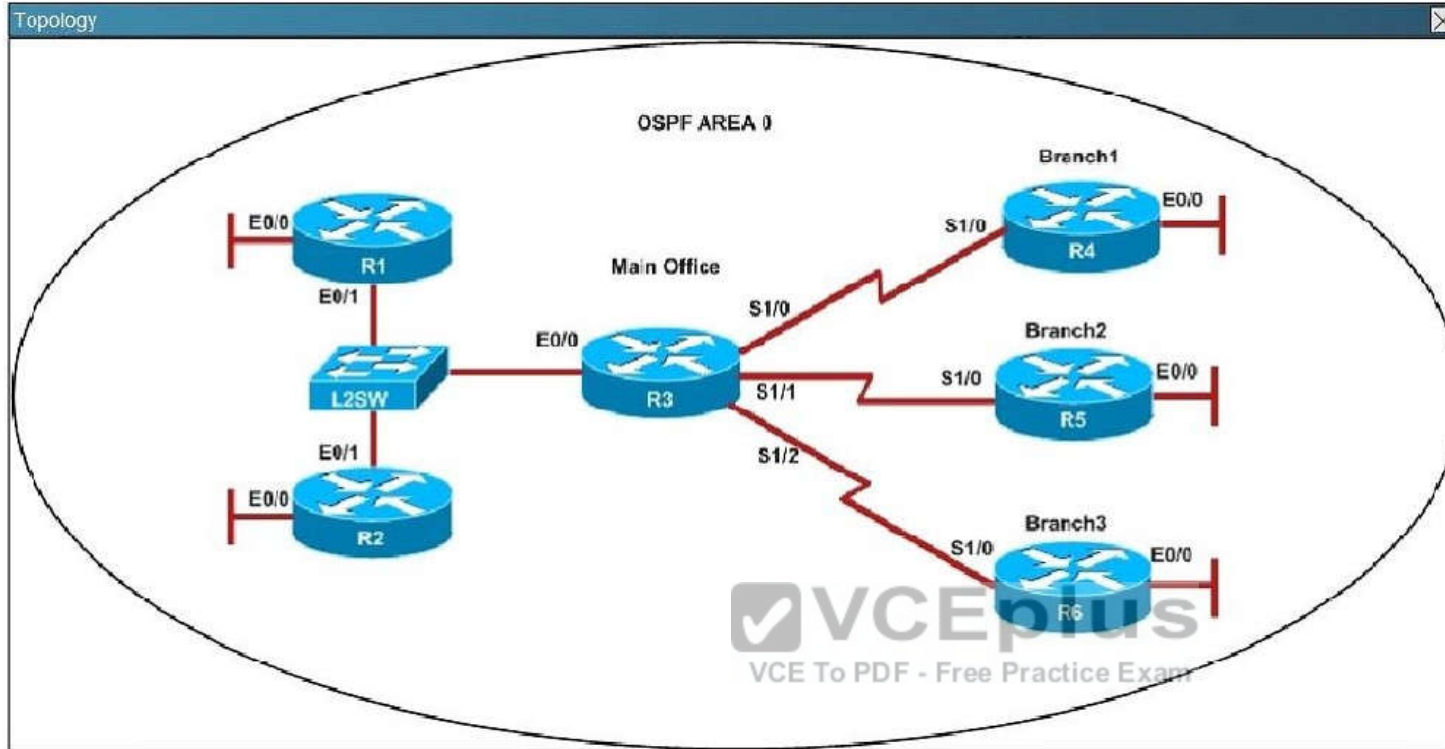
Save the configuration:

Gotha#copy running-config startup-config

Finally, you should use the ping command to verify all are working properly!

QUESTION 69

Refer to the topology. Your company has decided to connect the main office with three other remote branch offices using point-to-point serial links. You are required to troubleshoot and resolve OSPF neighbor adjacency issues between the main office and the routers located in the remote branch offices.



An OSPF neighbor adjacency is not formed between R3 in the main office and R5 in the Branch2 office. What is causing the problem?

- A. There is an area ID mismatch.
- B. There is a PPP authentication issue; a password mismatch.
- C. There is an OSPF hello and dead interval mismatch.
- D. There is a missing network command in the OSPF process on R5.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

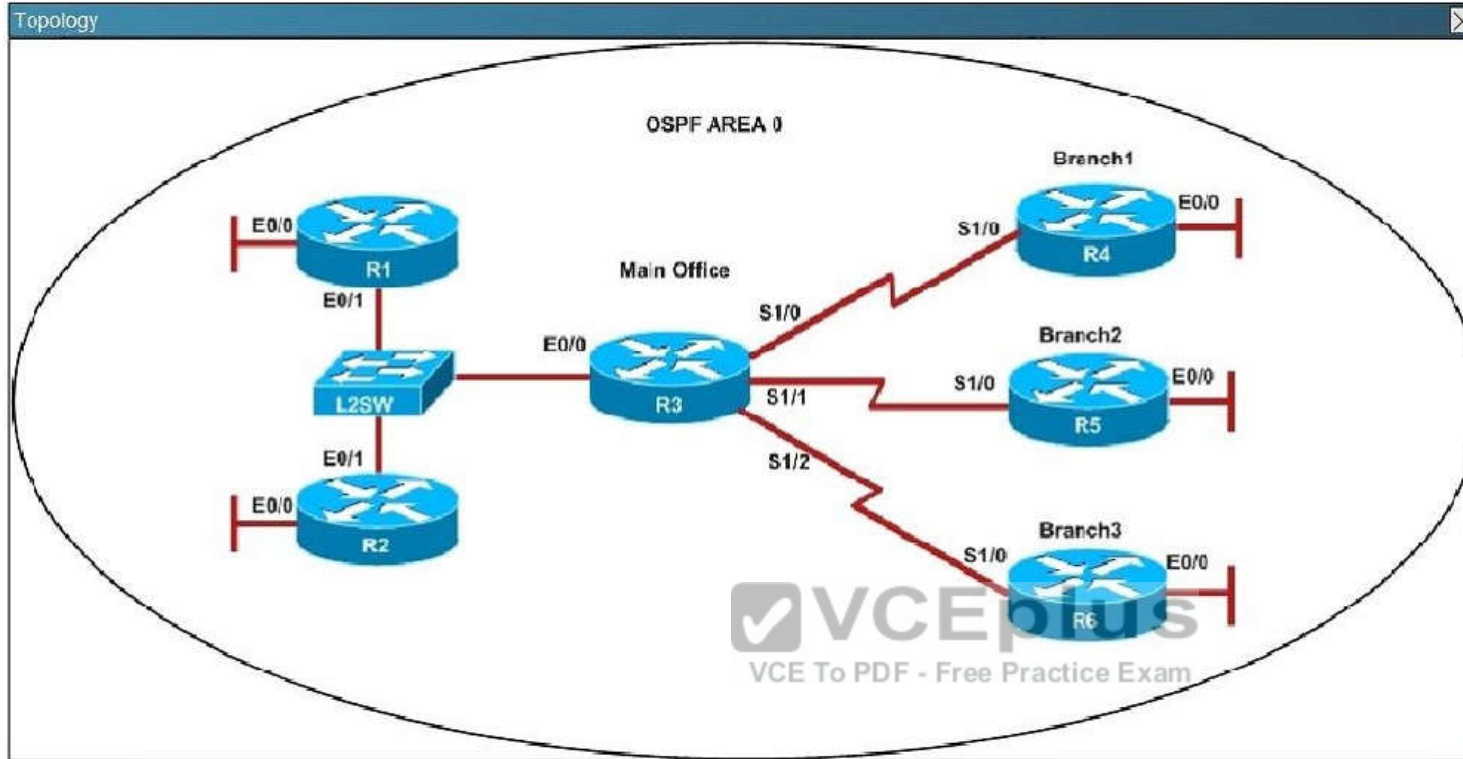
The "show ip ospf interface command on R3 and R5 shows that the hello and dead intervals do not match.

They are 50 and 200 on R3 and 10 and 40 on R5.

R3	R5
<pre> Suppress hello for 0 neighbor(s) Serial1/1 is up, line protocol is up Internet Address 10.10.240.5/30, Area 0, Attached via Interface Process ID 3, Router ID 192.168.3.3, Network Type POINT TO POINT Topology-MTID Cost Disabled Shutdown Topology Name 0 64 no no Base Enabled by interface config, including secondary ip addresses Transmit Delay is 1 sec, State POINT TO POINT Timer intervals configured, Hello 50, Dead 200, Wait 200, Retransmit 1, CoS-resync timeout 200 Hello due in 00:00:39 Supports Link-local Signaling (LLS) Cisco NSF helper support enabled IETF NSF helper support enabled Index 4/4, flood queue length 0 Next 0x0(0)/0x0(0) Last flood scan length is 0, maximum is 0 Last flood scan time is 0 msec, maximum is 0 msec Neighbor Count is 0, Adjacent neighbor count is 0 Suppress hello for 0 neighbor(s) Serial1/0 is up, line protocol is up Internet Address 10.10.240.1/30, Area 0, Attached via Interface Process ID 3, Router ID 192.168.3.3, Network Type POINT TO POINT Topology-MTID Cost Disabled Shutdown Topology Name 0 64 no no Base Enabled by interface config, including secondary ip addresses Transmit Delay is 1 sec, State POINT TO POINT Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 1, CoS-resync timeout 40 Hello due in 00:00:08 Supports Link-local Signaling (LLS) Cisco NSF helper support enabled IETF NSF helper support enabled Index 3/3, flood queue length 0 Next 0x0(0)/0x0(0) Last flood scan length is 0, maximum is 0 Last flood scan time is 0 msec, maximum is 0 msec Neighbor Count is 0, Adjacent neighbor count is 0 Suppress hello for 0 neighbor(s) Ethernet0/0 is up, line protocol is up Internet Address 172.16.1.1/24, Area 0, Attached via Interface </pre>	<pre> 0 1 no Enabled by interface config, including secondary ip addresses Loopback interface is treated as a point-to-point interface Serial1/0 is up, line protocol is up Internet Address 10.10.240.6/30, Area 0, Attached via Interface Process ID 5, Router ID 192.168.5.5, Network Type POINT TO POINT Topology-MTID Cost Disabled Shutdown Topology Name 0 64 no no Base Enabled by interface config, including secondary ip addresses Transmit Delay is 1 sec, State POINT TO POINT Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 1, CoS-resync timeout 40 Hello due in 00:00:08 Supports Link-local Signaling (LLS) Cisco NSF helper support enabled IETF NSF helper support enabled Index 3/3, flood queue length 0 Next 0x0(0)/0x0(0) Last flood scan length is 0, maximum is 0 Last flood scan time is 0 msec, maximum is 0 msec Neighbor Count is 0, Adjacent neighbor count is 0 Suppress hello for 0 neighbor(s) Ethernet0/0 is up, line protocol is up Internet Address 172.16.1.1/24, Area 0, Attached via Interface </pre>

QUESTION 70

Refer to the topology. Your company has decided to connect the main office with three other remote branch offices using point-to-point serial links. You are required to troubleshoot and resolve OSPF neighbor adjacency issues between the main office and the routers located in the remote branch offices.



R1 does not form an OSPF neighbor adjacency with R2. Which option would fix the issue?

- A. R1 ethernetO/1 is shutdown. Configure no shutdown command.
- B. R1 ethernetO/1 configured with a non-default OSPF hello interval of 25: configure no ip ospf hello-interval 25
- C. R2 ethernetO/1 and R3 ethernetO/0 are configured with a non-default OSPF hello interval of 25; configure no ip ospf hello-interval 25
- D. Enable OSPF for R1 ethernetO/1; configure ip ospf 1 area 0 command under ethernetO/1

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

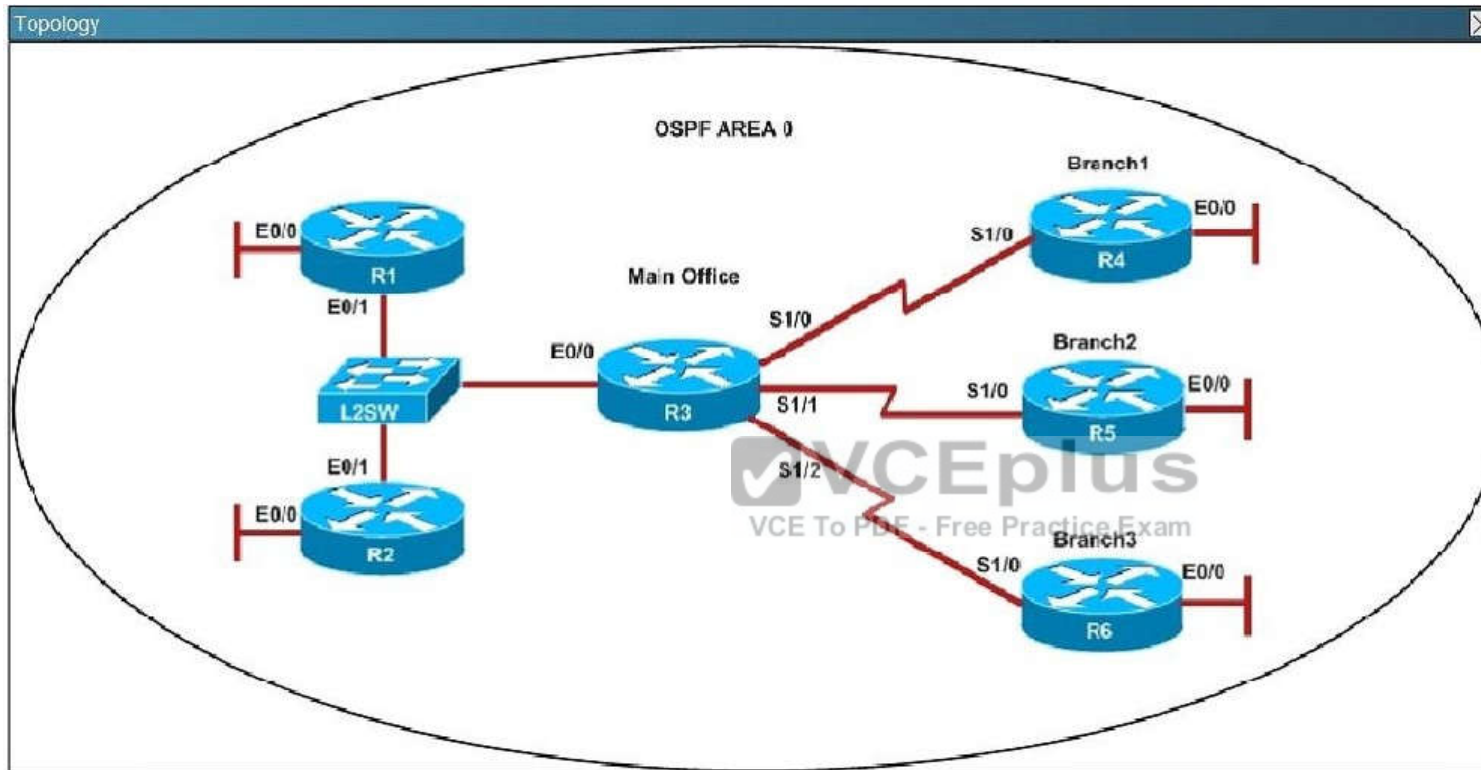
Looking at the configuration of R1, we see that R1 is configured with a hello interval of 25 on interface Ethernet 0/1 while R2 is left with the default of 10 (not

configured).

R1	R2
<pre> ! ! ! ! ! ! interface Loopback0 description ***Loopback*** ip address 192.168.1.1 255.255.255.255 ip ospf 1 area 0 ! interface Ethernet0/0 description ***Connected to R1-LAN*** ip address 10.10.110.1 255.255.255.0 ip ospf 1 area 0 ! interface Ethernet0/1 description ***Connected to L2SW*** ip address 10.10.230.1 255.255.255.0 ip ospf hello-interval 25 ip ospf 1 area 0 ! interface Ethernet0/2 no ip address shutdown --- More (35) --- </pre>	<pre> ! ! ! ! ! ! interface Loopback0 description ***Loopback*** ip address 192.168.2.2 255.255.255.255 ip ospf 2 area 0 ! interface Ethernet0/0 description ***Connected to R2-LAN*** ip address 10.10.120.1 255.255.255.0 ip ospf 2 area 0 ! interface Ethernet0/1 description ***Connected to L2SW*** ip address 10.10.230.2 255.255.255.0 ip ospf 2 area 0 ! interface Ethernet0/2 no ip address shutdown --- More (35) --- </pre>

QUESTION 71

Refer to the topology. Your company has decided to connect the main office with three other remote branch offices using point-to-point serial links. You are required to troubleshoot and resolve OSPF neighbor adjacency issues between the main office and the routers located in the remote branch offices.



An OSPF neighbor adjacency is not formed between R3 in the main office and R6 in the Branch3 office. What is causing the problem?

- A. There is an area ID mismatch.
- B. There is a PPP authentication issue; the username is not configured on R3 and R6.
- C. There is an OSPF hello and dead interval mismatch.
- D. The R3 router ID is configured on R6.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Using the show running-config command we see that R6 has been incorrectly configured with the same router ID as R3 under the router OSPF process.

R3	R6
<pre> ip address 10.10.240.5 255.255.255.252 encapsulation ppp ip ospf hello-interval 50 ip ospf 3 area 0 ppp authentication chap serial restart-delay 0 ! interface Serial1/2 description ***Connected to R6-Branch3 office*** ip address 10.10.240.9 255.255.255.252 encapsulation ppp ip ospf 3 area 0 ppp authentication chap serial restart-delay 0 ! interface Serial1/3 no ip address shutdown serial restart-delay 0 ! router ospf 3 router-id 192.168.3.3 ! ip forward-protocol nd ! </pre>	<pre> no ip address shutdown serial restart-delay 0 ! interface Serial1/2 no ip address shutdown serial restart-delay 0 ! interface Serial1/3 no ip address shutdown serial restart-delay 0 ! router ospf 6 router-id 192.168.3.3 ! ip forward-protocol nd ! no ip http server no ip http secure-server ! ! </pre>

QUESTION 72

Instructions

You can click on the grey buttons below to view the different windows.

Each of the windows can be minimized by clicking on the [-]. You can also reposition a window by dragging it by the title bar.

The "Tab" key and most commands that use the "Control" or "Escape" keys are not supported and are not necessary to complete this simulation.

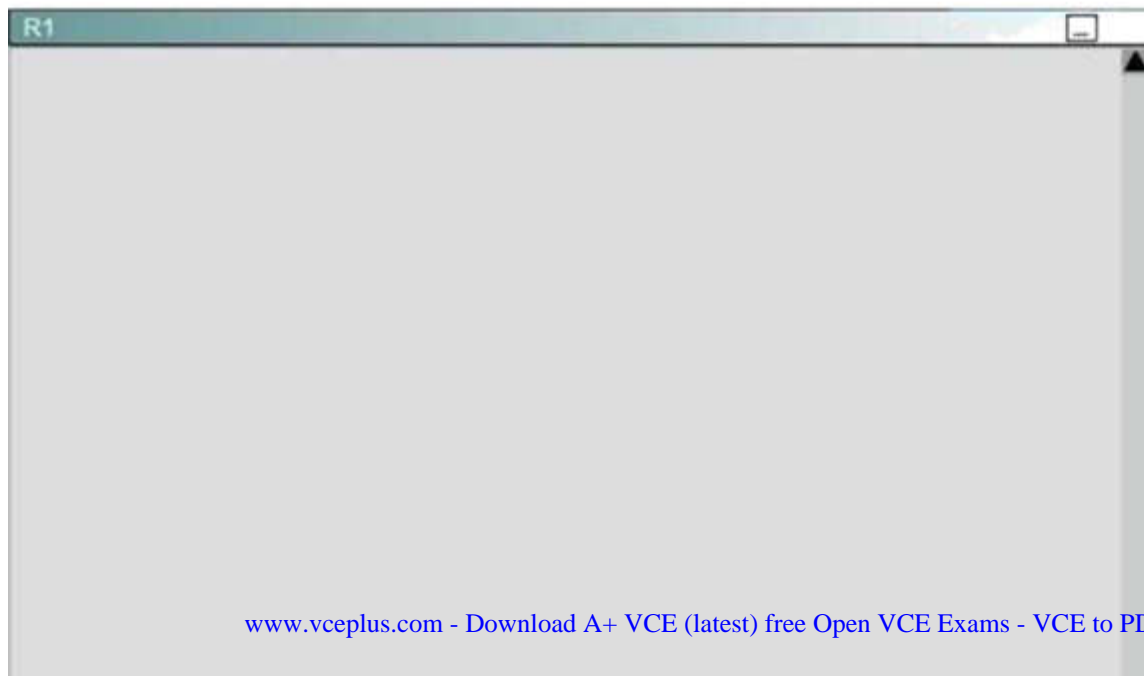
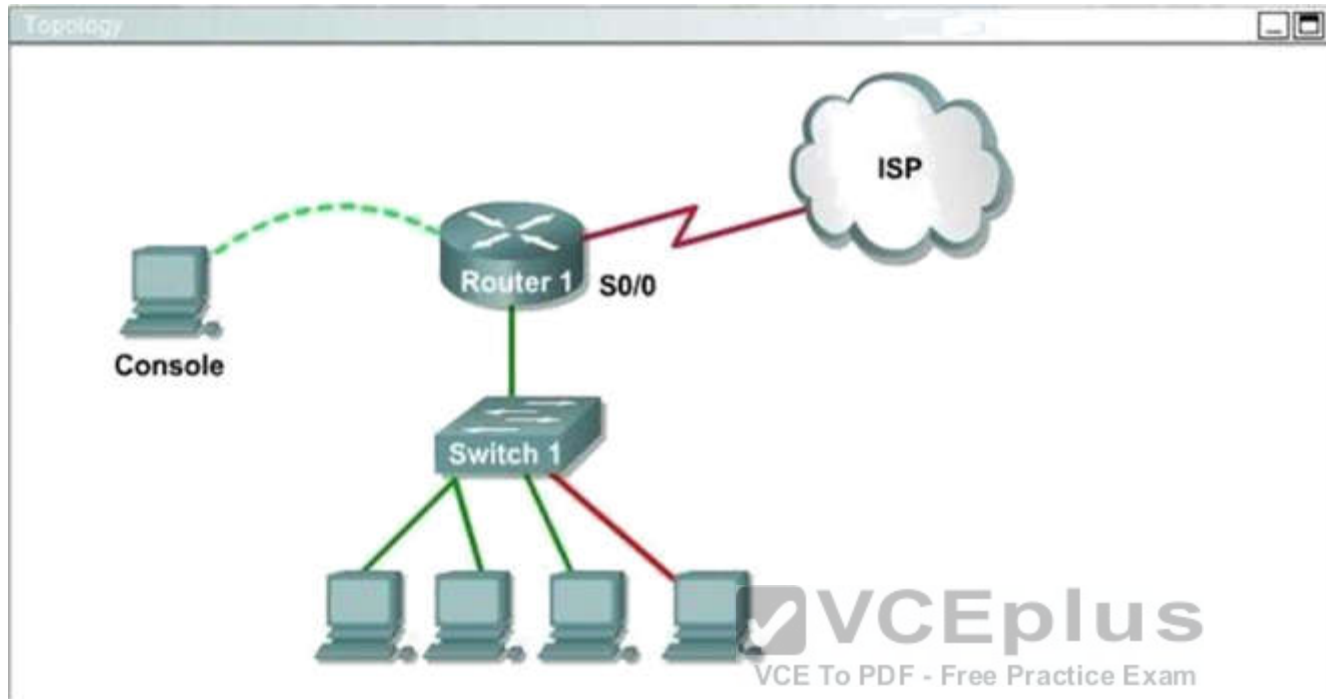
Scenario

This task requires the use of various **show** commands from the CLI of Router1 to answer four multiple-choice questions. This task does **not** require any configuration.

NOTE: The show running-configuration and the show startup-configuration commands have been disabled in this simulation.

To access the multiple-choice questions, click on the numbered boxes on the right of the top panel.

There are 4 multiple-choice questions with this task. Be sure to answer all 4 questions before leaving this item.



What interfaces on Router1 have not had any configurations applied? (Choose two.)

- A. Ethernet 0
- B. FastEthernet 0/0
- C. FastEthernet 0/1
- D. Serial 0
- E. Serial 0/0
- F. Serial 0/1

Correct Answer: BF

Section: (none)

Explanation

Explanation/Reference:

Explanation:

User the "show ip interface brief" command

Notice that Router1 does not have Ethernet 0 and Serial 0 interfaces. FastEthernet 0/1 and Serial 0/0 were configured with their IP addresses therefore only FastEthernet 0/0 and Serial0/1 have not had any configurations applied.

```
CiscoTerminal

Press RETURN to get started.

Router1>en
Router1#show ip int brief
Interface      IP-Address      OK? Method Status      Protocol
FastEthernet0/0 unassigned      YES unset   administratively down down
FastEthernet0/1 192.168.200.23 YES manual    up          up
Serial0/0        10.11.12.13     YES manual   administratively down down
Serial0/1        unassigned      YES unset   administratively down down
Router1#_
```

QUESTION 73

Instructions

You can click on the grey buttons below to view the different windows.

Each of the windows can be minimized by clicking on the [-]. You can also reposition a window by dragging it by the title bar.

The "Tab" key and most commands that use the "Control" or "Escape" keys are not supported and are not necessary to complete this simulation.

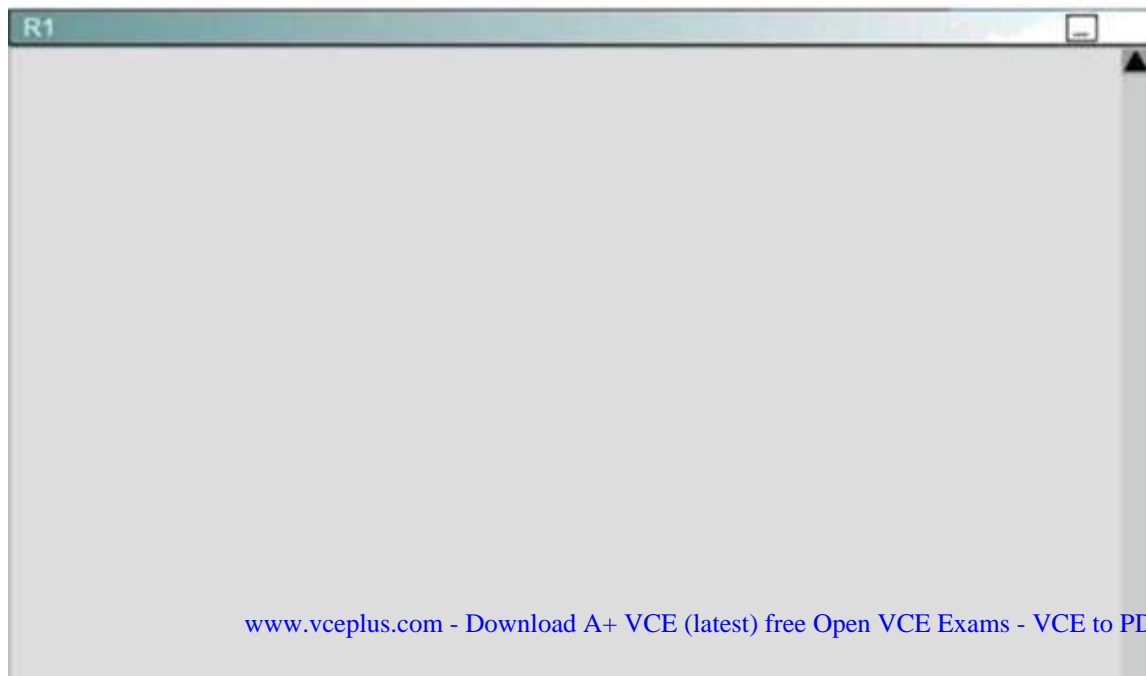
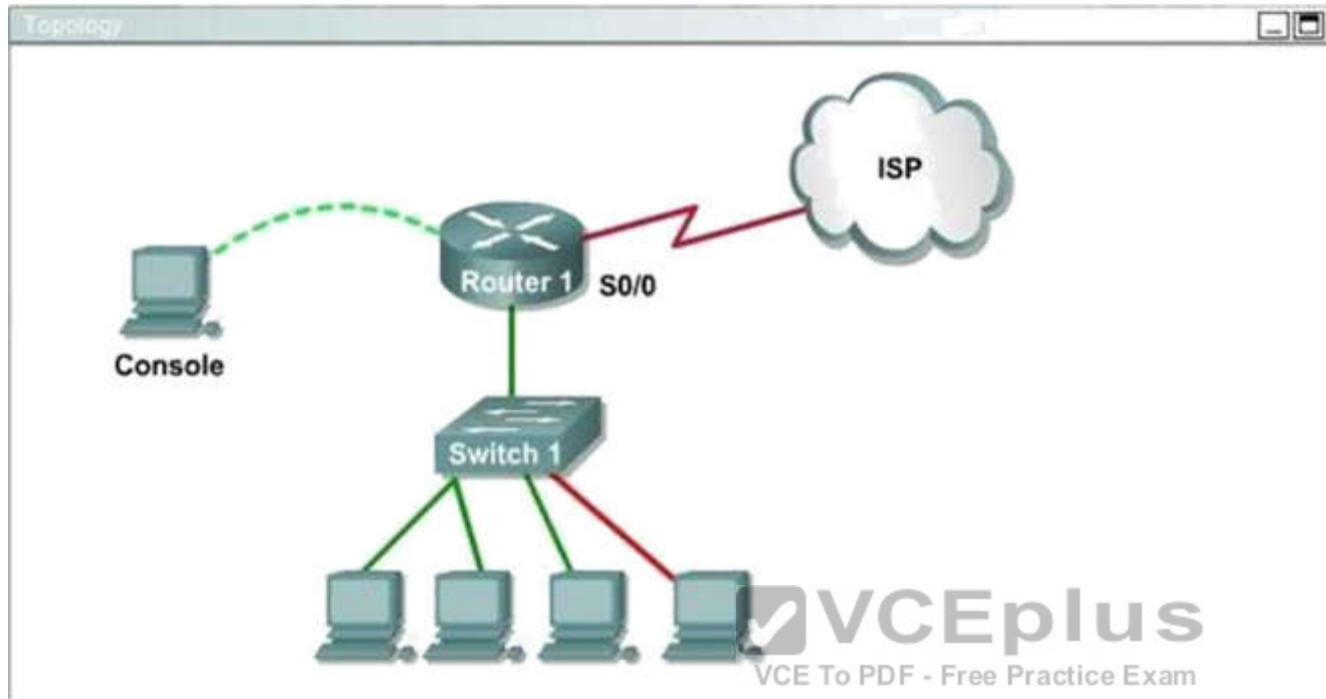
Scenario

This task requires the use of various **show** commands from the CLI of Router1 to answer four multiple-choice questions. This task does **not** require any configuration.

NOTE: The show running-configuration and the show startup-configuration commands have been disabled in this simulation.

To access the multiple-choice questions, click on the numbered boxes on the right of the top panel.

There are 4 multiple-choice questions with this task. Be sure to answer all 4 questions before leaving this item.



Including the address on the Router1 Ethernet interface, how many hosts can have IP addresses on the LAN to which Router1 is connected?

- A. 6
- B. 14
- C. 62
- D. 126

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

The mask address of interface Fa0/1 of Router1 is /28, which has four 0 bits (1111 1111.1111 1111.1111 1111.1111 0000). Therefore, there are $2^4 - 2 = 14$ assignable IP addresses for hosts on the LAN.

QUESTION 74

Click on the correct location or locations in the exhibit.



Instructions	
<p>This item contains several questions that you must answer. You can view these questions by clicking on the corresponding button to the left. Changing questions can be accomplished by clicking the numbers to the left of each question. In order to complete the questions, you will need to refer to the Exhibit.</p> <p>To gain access to the Exhibit, click on the Exhibit button at the bottom of the screen. When you have finished viewing the Exhibit, you can return to your questions by clicking on the Questions button to the left.</p> <p>Each of the windows can be minimized by clicking on the [-]. You can also reposition a window by dragging it by the title bar.</p>	
Scenario	
<p>Refer to the Exhibit. As the first step in verifying a local host configuration, a network technician issues the ipconfig /all command on a computer. Use the results of the command to answer the five questions shown on the Questions tab.</p>	

Exhibit

```

C:\WINNT\system32\cmd.exe

Connection-specific DNS Suffix  . : cisco.com
Description . . . . . : Intel(R) PRO/1000 MT Mobile

Physical Address. . . . . : 00-0D-60-FD-F0-34
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . : Yes
IP Address. . . . . : 172.16.236.227
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 172.16.236.1
DHCP Server . . . . . : 172.16.3.2
DNS Servers . . . . . : 10.4.8.1
                        10.5.2.22
Primary WINS Server . . . . . : 10.69.2.87
Secondary WINS Server . . . . . : 10.69.235.228
Lease Obtained. . . . . : Monday, June 11, 2007 9:26:45 AM
Lease Expires . . . . . : Thursday, June 14, 2007 9:26:45 AM

Ethernet adapter Local Area Connection:

Media State . . . . . : Cable Disconnected
Description . . . . . : Cisco Systems Wireless LAN Adapter
Physical Address. . . . . : 00-0E-9B-48-86-20
  
```

Which of these destination addresses does not require the use of the default gateway for a packet from this local host?

- A. 10.4.8.2
- B. 10.5.2.27
- C. 10.68.2.88
- D. 172.16.3.228
- E. 172.16.236.4

Correct Answer: E

Section: (none)

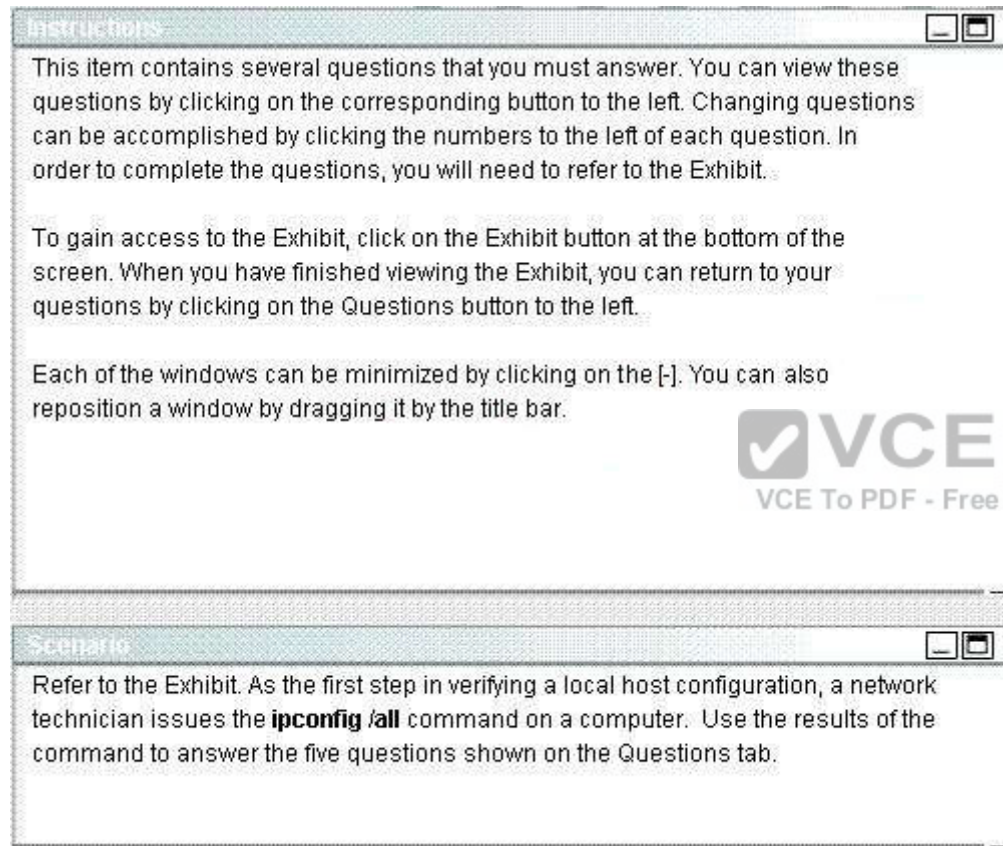
Explanation

Explanation/Reference:

Explanation:

QUESTION 75

Click on the correct location or locations in the exhibit.



Exhibit

```

C:\WINNT\system32\cmd.exe

Connection-specific DNS Suffix  : cisco.com
Description . . . . . : Intel(R) PRO/1000 MT Mobile

Physical Address. . . . . : 00-0D-60-FD-F0-34
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . : Yes
IP Address. . . . . : 172.16.236.227
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 172.16.236.1
DHCP Server . . . . . : 172.16.3.2
DNS Servers . . . . . : 10.4.8.1
                        10.5.2.22
Primary WINS Server . . . . . : 10.69.2.87
Secondary WINS Server . . . . . : 10.69.235.228
Lease Obtained. . . . . : Monday, June 11, 2007 9:26:45 AM
Lease Expires . . . . . : Thursday, June 14, 2007 9:26:45 AM

Ethernet adapter Local Area Connection:

Media State . . . . . : Cable Disconnected
Description . . . . . : Cisco Systems Wireless LAN Adapter
Physical Address. . . . . : 00-0E-9B-48-86-20
  
```

Which IP address represents the first server this computer will attempt to contact to resolve an Internet web site URL to an IP address?

- A. 10.4.8.1
- B. 10.69.2.87
- C. 172.16.3.2
- D. 172.16.236.1

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 76

Click on the correct location or locations in the exhibit.

Instructions

This item contains several questions that you must answer. You can view these questions by clicking on the corresponding button to the left. Changing questions can be accomplished by clicking the numbers to the left of each question. In order to complete the questions, you will need to refer to the Exhibit.

To gain access to the Exhibit, click on the Exhibit button at the bottom of the screen. When you have finished viewing the Exhibit, you can return to your questions by clicking on the Questions button to the left.

Each of the windows can be minimized by clicking on the [-]. You can also reposition a window by dragging it by the title bar.

Scenario

Refer to the Exhibit. As the first step in verifying a local host configuration, a network technician issues the **ipconfig /all** command on a computer. Use the results of the command to answer the five questions shown on the Questions tab.

Exhibit

```

C:\WINNT\system32\cmd.exe

Connection-specific DNS Suffix . : cisco.com
Description . . . . . : Intel(R) PRO/1000 MT Mobile

Physical Address. . . . . : 00-0D-60-FD-F0-34
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . : Yes
IP Address. . . . . : 172.16.236.227
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 172.16.236.1
DHCP Server . . . . . : 172.16.3.2
DNS Servers . . . . . : 10.4.8.1
                        10.5.2.22
Primary WINS Server . . . . . : 10.69.2.87
Secondary WINS Server . . . . . : 10.69.235.228
Lease Obtained. . . . . : Monday, June 11, 2007 9:26:45 AM
Lease Expires . . . . . : Thursday, June 14, 2007 9:26:45 AM

Ethernet adapter Local Area Connection:

Media State . . . . . : Cable Disconnected
Description . . . . . : Cisco Systems Wireless LAN Adapter
Physical Address. . . . . : 00-0E-9B-48-86-20
  
```

From this computer, the network technician is able to successfully ping to the IP address of the primary DNS server configured on the computer. What can the network technician determine about the network?

- A. The DNS server is able to resolve domain names to IP addresses.
- B. The router with address 172.16.3.2 has the correct route to the 10.0.0.0 network.
- C. The names of all the routes in the path can be resolved by the configured DNS servers.
- D. The router with address 172.16.236.1 has a route it can use to reach network of the DNS server.

Correct Answer: D

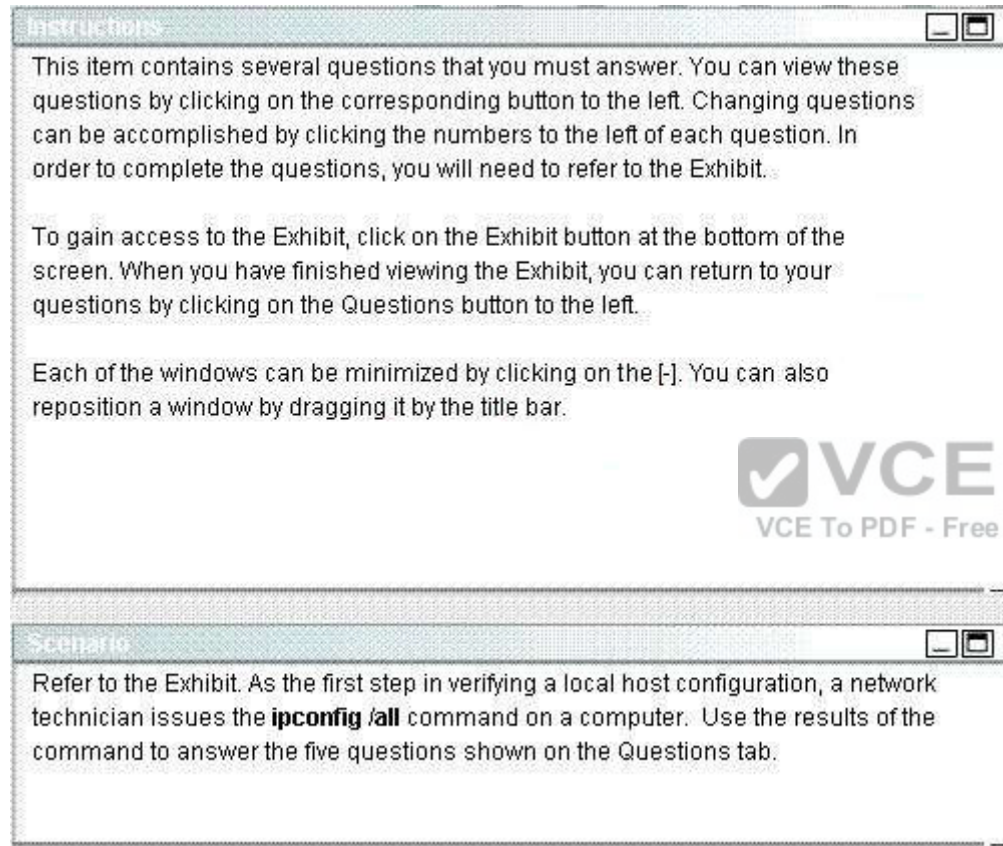
Section: (none)

Explanation

Explanation/Reference:

QUESTION 77

Click on the correct location or locations in the exhibit.



The screenshot shows a VCE exam interface with two windows. The top window is titled 'Instructions' and contains the following text:

This item contains several questions that you must answer. You can view these questions by clicking on the corresponding button to the left. Changing questions can be accomplished by clicking the numbers to the left of each question. In order to complete the questions, you will need to refer to the Exhibit.

To gain access to the Exhibit, click on the Exhibit button at the bottom of the screen. When you have finished viewing the Exhibit, you can return to your questions by clicking on the Questions button to the left.

Each of the windows can be minimized by clicking on the [-]. You can also reposition a window by dragging it by the title bar.

The bottom window is titled 'Scenario' and contains the following text:

Refer to the Exhibit. As the first step in verifying a local host configuration, a network technician issues the **ipconfig /all** command on a computer. Use the results of the command to answer the five questions shown on the Questions tab.

Exhibit

```

C:\WINNT\system32\cmd.exe

Connection-specific DNS Suffix  : cisco.com
Description . . . . . : Intel(R) PRO/1000 MT Mobile

Physical Address. . . . . : 00-0D-60-FD-F0-34
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . : Yes
IP Address. . . . . : 172.16.236.227
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 172.16.236.1
DHCP Server . . . . . : 172.16.3.2
DNS Servers . . . . . : 10.4.8.1
                        10.5.2.22
Primary WINS Server . . . . . : 10.69.2.87
Secondary WINS Server . . . . . : 10.69.235.228
Lease Obtained. . . . . : Monday, June 11, 2007 9:26:45 AM
Lease Expires . . . . . : Thursday, June 14, 2007 9:26:45 AM

Ethernet adapter Local Area Connection:

Media State . . . . . : Cable Disconnected
Description . . . . . : Cisco Systems Wireless LAN Adapter
Physical Address. . . . . : 00-0E-9B-48-86-20
  
```

What two things can the technician determine by successfully pinging from this computer to the IP address 172.16.236.1? (Choose two.)

- A. The network card on the computer is functioning correctly.
- B. The default static route on the gateway router is correctly configured.
- C. The correct default gateway IP address is configured on the computer.
- D. The device with the IP address 172.16.236.1 is reachable over the network.
- E. The device gateway at 172.16.236.1 is able to forward packets to the Internet.

Correct Answer: AD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 78

Click on the correct location or locations in the exhibit.

Instructions

This item contains several questions that you must answer. You can view these questions by clicking on the corresponding button to the left. Changing questions can be accomplished by clicking the numbers to the left of each question. In order to complete the questions, you will need to refer to the Exhibit.

To gain access to the Exhibit, click on the Exhibit button at the bottom of the screen. When you have finished viewing the Exhibit, you can return to your questions by clicking on the Questions button to the left.

Each of the windows can be minimized by clicking on the [-]. You can also reposition a window by dragging it by the title bar.

Scenario

Refer to the Exhibit. As the first step in verifying a local host configuration, a network technician issues the **ipconfig /all** command on a computer. Use the results of the command to answer the five questions shown on the Questions tab.

Exhibit

```

C:\WINNT\system32\cmd.exe

Connection-specific DNS Suffix  : cisco.com
Description . . . . . : Intel(R) PRO/1000 MT Mobile

Physical Address. . . . . : 00-0D-60-FD-F0-34
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . : Yes
IP Address. . . . . : 172.16.236.227
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 172.16.236.1
DHCP Server . . . . . : 172.16.3.2
DNS Servers . . . . . : 10.4.8.1
                        10.5.2.22
Primary WINS Server . . . . . : 10.69.2.87
Secondary WINS Server . . . . . : 10.69.235.228
Lease Obtained. . . . . : Monday, June 11, 2007 9:26:45 AM
Lease Expires . . . . . : Thursday, June 14, 2007 9:26:45 AM

Ethernet adapter Local Area Connection:

Media State . . . . . : Cable Disconnected
Description . . . . . : Cisco Systems Wireless LAN Adapter
Physical Address. . . . . : 00-0E-9B-48-86-20
  
```

Whit statement is true about how the router with the IP address 172.16.236.1 will send a data packet to this computer?

- A. The router encapsulates the packet in a frame addressed to the MAC address FF-FF-FF-FF-FF-FF and sends it out the interface connected to the 172.16.236.0 network.
- B. The router uses an ARP request to obtain the correct MAC address for the computer. It then encapsulates the packet in a frame addressed to the MAC address 00-0D-60-FD-F0-34.
- C. The router encapsulates the packet in a frame addressed to the MAC address of the next hop router on the path to the computer.
- D. The router works at Layer 3 of the OSI model and does not use Layer 2 MAC addresses to send packets to the destination computer.

Correct Answer: B

Section: (none)

Explanation

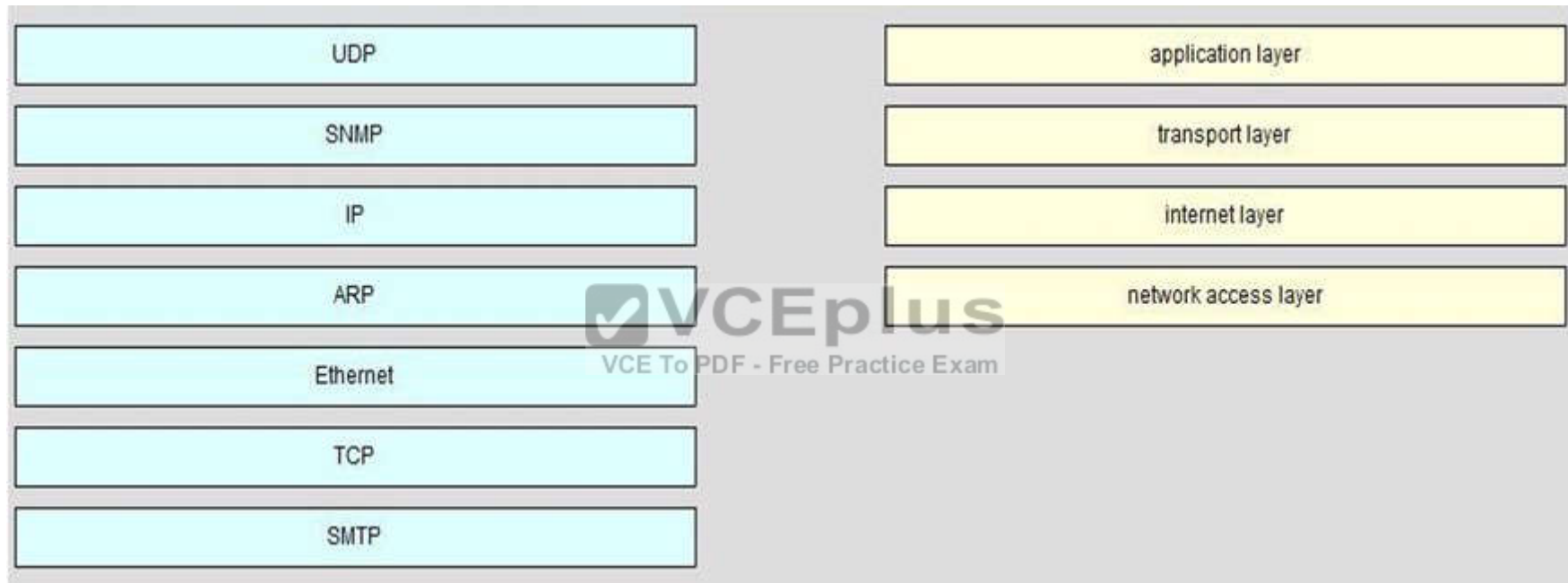
Explanation/Reference:

QUESTION 79

DRAG DROP

On the left are various network protocols. On the right are the layers of the TCP/IP model. Assuming a reliable connection is required, move the protocols on the left to the TCP/IP layers on the right to show the proper encapsulation for an email message sent by a host on a LAN. (Not all options are used.)

Select and Place:



Correct Answer:

UDP	SMTP
SNMP	TCP
	IP
ARP	Ethernet

Section: (none)

Explanation

Explanation/Reference:

QUESTION 80

DRAG DROP


Various protocols are listed on the left On the right are applications for the use of those protocols. Drag the protocol on the left to an associated function for that protocol on the right (Not all options are used).

Select and Place:

ICMP	A PC sends packets to the default gateway IP address the first time since the PC turned on.
DHCP	The network administrator is checking basic IP connectivity from a workstation to a server.
RARP	The TCP/IP protocol stack must find an IP address for packets destined for a URL.
UDP	A network device will automatically assign IP addresses to workstations.
DNS	
ARP	

Correct Answer:

	ARP
	ICMP
RARP	DNS
UDP	DHCP

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Section: (none)

Explanation

Explanation/Reference:


QUESTION 81

DRAG DROP

Move the protocol or service on the left to a situation on the right where it would be used. (Not all options are used).


Select and Place:

OSPF	A PC with address 10.1.5.10 must access devices on the Internet.
ARP	Only routers and servers require static IP addresses. Easy IP administration is required.
NAT	A PC only knows a server as //MediaServer . IP needs to send data to that server.
DNS	A protocol is needed to replace current static routes with automatic route updates.
SQL	
DHCP	

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Correct Answer:

	NAT
ARP	DHCP
	DNS
	OSPF
SQL	

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Section: (none)

Explanation

Explanation/Reference:

QUESTION 82

DRAG DROP

Drag the definition on the left to the correct term on the right. Not all definitions on the left will be used.

Select and Place:

a protocol that converts human-readable names into machine-readable addresses	SNMP
used to assign IP addresses automatically and set parameters such as subnet mask and default gateway	FTP
a protocol for using HTTP or HTTPS to exchange XML-based messages over computer networks	TFTP
a connectionless service that uses UDP to transfer files between systems	DNS
a protocol used to monitor and manage network devices	DHCP
a reliable, connection-oriented service that uses TCP to transfer files between systems	

Correct Answer:

	a protocol used to monitor and manage network devices
	a reliable, connection-oriented service that uses TCP to transfer files between systems
a protocol for using HTTP or HTTPS to exchange XML-based messages over computer networks	a connectionless service that uses UDP to transfer files between systems
	a protocol that converts human-readable names into machine-readable addresses
	used to assign IP addresses automatically and set parameters such as subnet mask and default gateway

Section: (none)

Explanation

Explanation/Reference:

QUESTION 83

DRAG DROP

Drag the appropriate command on the left to the configuration task it accomplishes (not all options are used).

Select and Place:

login password cantCome1n	encrypt all clear text passwords
enable password uwi11NeverNo	protect access to the user mode prompt
service password-encryption	set privileged mode encrypted password
line console 0 password friendS0nly	set password to allow Telnet connections
enable secret noWay1n4u	set privileged mode clear text password
line vty 0 4 password 2hard2Guess	

Correct Answer:

login password cantCome1n	service password-encryption
	line console 0
	password friendS0nly
	enable secret noWay1n4u
	line vty 0 4
	password 2hard2Guess
	enable password uwi11NeverNo

Section: (none)

Explanation

Explanation/Reference:

Explanation:

service password-encryption	encrypt all clear text passwords
line console 0 password friend\$only	protect access to the user mode prompt
enable secret noWay1n4u	set privileged mode encrypted password
line vty 0 4 password 2hard2Guess	set password to allow Telnet connections
enable password uwi11NeverNo	set privileged mode clear text password

QUESTION 84

Scenario:

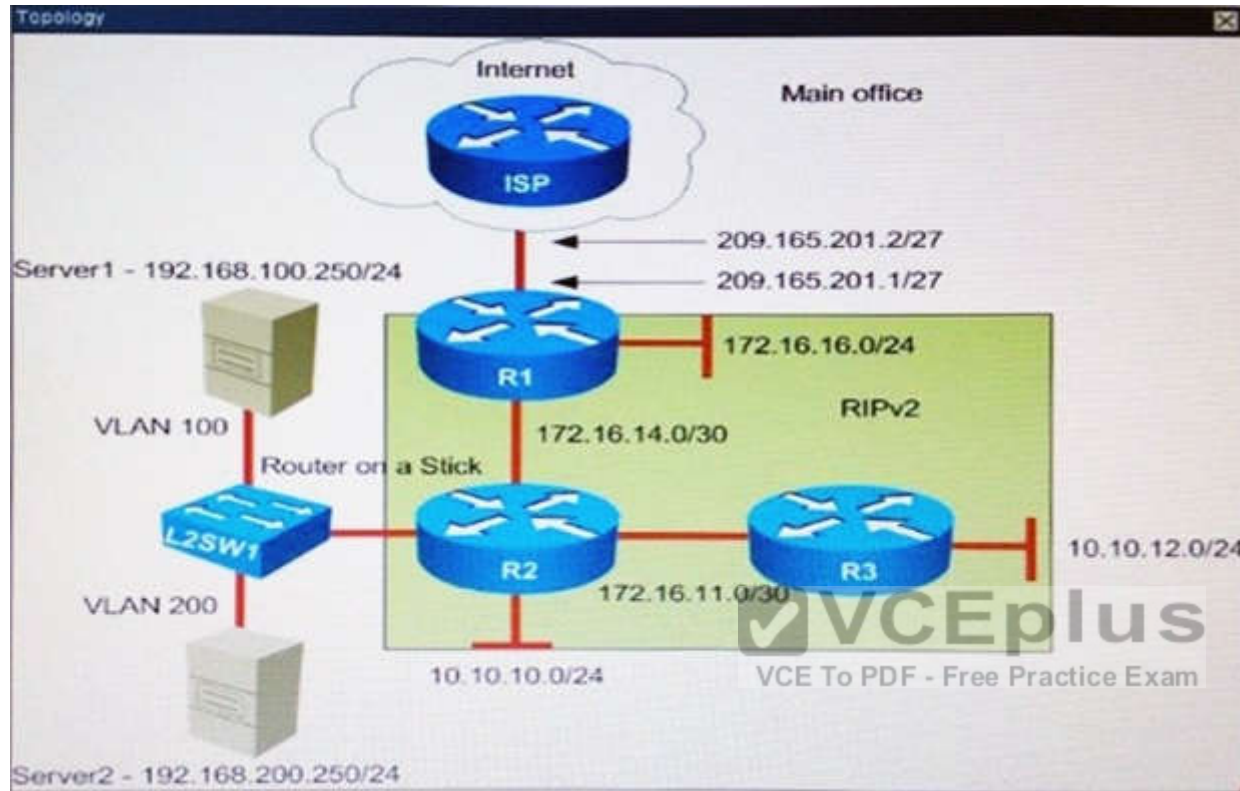
You work for a company that provides managed network services, and of your real estate clients running a small office is experiencing network issues, Troubleshoot the network issues.

Router R1 connects the main office to internet, and routers R2 and R3 are internal routers NAT is enabled on Router R1.
 The routing protocol that is enable between routers R1, R2, and R3 is RIPv2.
 R1 sends default route into RIPv2 for internal routers to forward internet traffic to R1.

Server1 and Server2 are placed in VLAN 100 and 200 respectively, and are still running router on stick configuration with router R2.
 You have console access on R1, R2, R3, and L2SW1 devices.
 Use only show commands to troubleshoot the issues.

Instructions

- Enter IOS commands on the device to verify network operation and answer the multiple-choice questions.
- This task does not require device configuration.
- Click the device icon to gain access to the console of the device. No console or enable passwords are required.
- To access the multiple-choice questions, click the numbered boxes on the left of the top panel.
- There are four multiple-choice questions with this task. Be sure to answer all four questions before clicking Next.



Server1 and Server2 are unable to communicate with the rest of the network.
Your initial check with system administrators shows that IP address settings are correctly configured on the server side.
What could be an issue?

- A. The VLAN encapsulation is misconfigured on the router subinterfaces.
- B. The Router is missing subinterface configuration.
- C. The Trunk is not configured on the L2SW1 switch.
- D. The IP address is misconfigured on the primary router interface.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Check the configuration of the interface that is connected to Server1 and Server2 on R2 with “show running-config” command.

```
R2#show running-config
```

```
<output omitted>
```

```
interface Ethernet0/1.100
  description Link to Server1 Segment
  encapsulation dot1Q 200
  ip address 192.168.100.1 255.255.255.0
!
interface Ethernet0/1.200
  description Link to Server2 Segment
  encapsulation dot1Q 100
  ip address 192.168.200.1 255.255.255.0
!
```

We see that subinterface E0/1.100 has been configured with VLAN 200 (via “encapsulation dot1Q 200” command) while Server1 belongs to VLAN 100. Therefore this configuration is not correct. It should be “encapsulation dot1Q 100” instead. The same thing for interface E0/1.200, it should be “encapsulation dot1Q 200” instead.

QUESTION 85

You work for a company that provides managed network services, and of your real estate clients running a small office is experiencing network issues, Troubleshoot the network issues.

Router R1 connects the main office to internet, and routers R2 and R3 are internal routers NAT is enabled on Router R1.
The routing protocol that is enable between routers R1, R2, and R3 is RIPv2.
R1 sends default route into RIPv2 for internal routers to forward internet traffic to R1.

Server1 and Server2 are placed in VLAN 100 and 200 respectively, and dare still running router on stick configuration with router R2.
You have console access on R1, R2, R3, and L2SW1 devices.
Use only show commands to troubleshoot the issues.

Instructions

- Enter IOS commands on the device to verify network operation and answer the multiple-choice questions.
- This task does not require device configuration.
- Click the device icon to gain access to the console of the device. No console or enable passwords are required.
- To access the multiple-choice questions, click the numbered boxes on the left of the top panel.

-

What could be an issue? Ping to Internet server shows the following results from R1:


```
R1#ping 209.165.200.225
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 209.165.200.225, timeout is 2 seconds:
.....
Success rate is 0 percent (0/5)
```

- A. The next hop router address for the default route is incorrectly configured.
- B. Default route pointing to ISP router is not configured on Router R1.
- C. Default route pointing to ISP router is configured with AD of 225.
- D. Router R1 configured as DHCP client is not receiving default route via DHCP from ISP router.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

When all the users cannot reach internet sites we should check on the router connecting to the ISP to see if it has a default route pointing to the ISP or not. Use the "show ip route" command on R1:

```
R1#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B -
BGP
        D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
        N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
        E1 - OSPF external type 1, E2 - OSPF external type 2
        i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS
level-2
        ia - IS-IS inter area, * - candidate default, U - per-user
static route
        o - ODR, P - periodic downloaded static route, H - NHRP, l -
LISP
        a - application route
        + - replicated route, % - next hop override
```

Gateway of last resort is not set

```

10.0.0.0/24 is subnetted, 1 subnets
R      10.10.10.0 [120/1] via 172.16.14.2, 00:00:06, Ethernet0/2
172.16.0.0/16 is variably subnetted, 5 subnets, 3 masks
R      172.16.11.0/30 [120/1] via 172.16.14.2, 00:00:14, Ethernet0/2
C      172.16.14.0/30 is directly connected, Ethernet0/2
L      172.16.14.1/32 is directly connected, Ethernet0/2
C      172.16.16.0/24 is directly connected, Ethernet0/1
L      172.16.16.1/32 is directly connected, Ethernet0/1
R      192.168.100.0/24 [120/1] via 172.16.14.2, 00:00:14, Ethernet0/2
R      192.168.200.0/24 [120/1] via 172.16.14.2, 00:00:14, Ethernet0/2
209.165.201.0/24 is variably subnetted, 2 subnets, 2 masks
C      209.165.201.0/27 is directly connected, Ethernet0/0
L      209.165.201.1/32 is directly connected, Ethernet0/0
```

We cannot find a default route on R1 (something like this: S* 0.0.0.0/0 [1/0] via 209.165.201.2) so maybe R1 was not configured with a default route. We can check with the "show running-config" on R1:

```
R1#show running-config
<output omitted>
ip route 10.10.10.0 255.255.255.0 172.16.14.2 200
<output omitted>
```

We need a default route (like "ip route 0.0.0.0 0.0.0.0 209.165.201.2") but we cannot find here so we can conclude R1 was not be configured with a default route pointing to the ISP router.

QUESTION 86

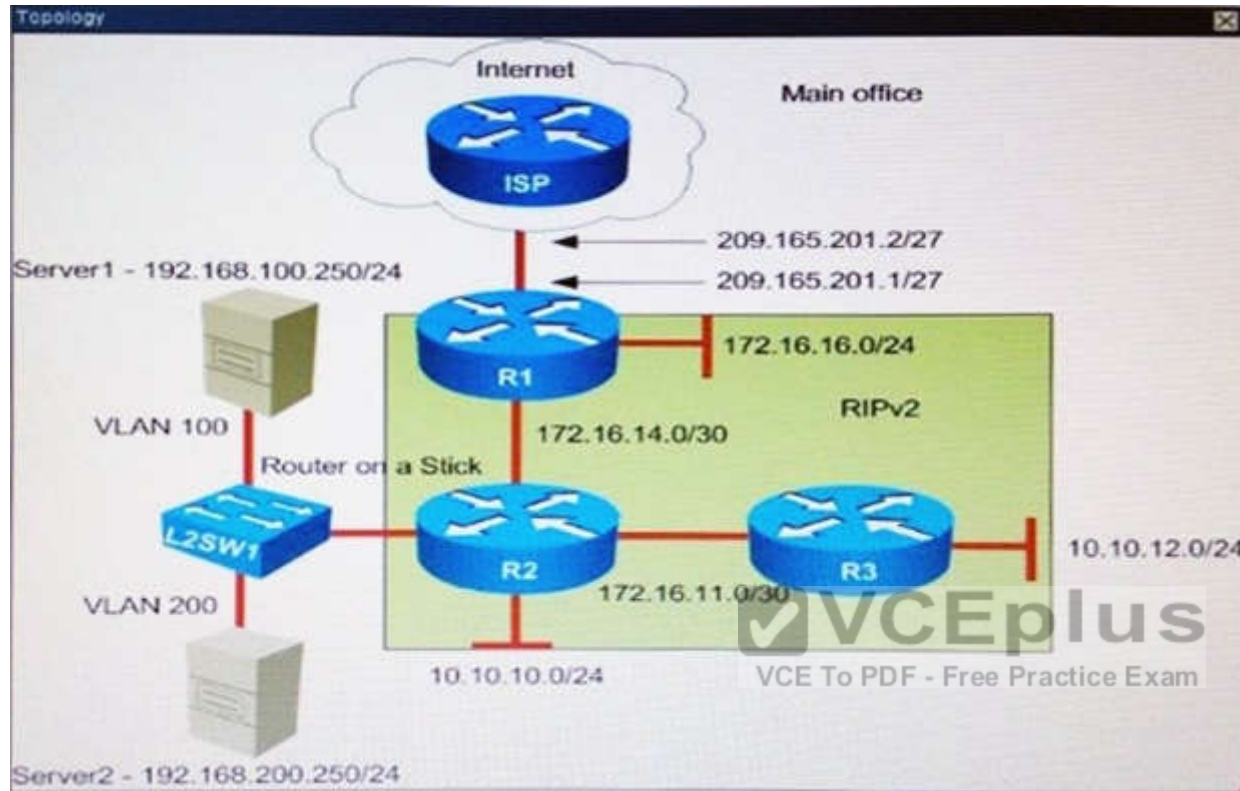
You work for a company that provides managed network services, and of your real estate clients running a small office is experiencing network issues, Troubleshoot the network issues.

Router R1 connects the main office to internet, and routers R2 and R3 are internal routers NAT is enabled on Router R1.
The routing protocol that is enable between routers R1, R2, and R3 is RIPv2.
R1 sends default route into RIPv2 for internal routers to forward internet traffic to R1.

Server1 and Server2 are placed in VLAN 100 and 200 respectively, and dare still running router on stick configuration with router R2.
You have console access on R1, R2, R3, and L2SW1 devices.
Use only show commands to troubleshoot the issues.

Instructions

- Enter IOS commands on the device to verify network operation and answer the multiple-choice questions.
- This task does not require device configuration.
- Click the device icon to gain access to the console of the device. No console or enable passwords are required.
- To access the multiple-choice questions, click the numbered boxes on the left of the top panel.
- There are four multiple-choice questions with this task. Be sure to answer all four questions before clicking Next.



Examine R2 configuration, the traffic that is destined to R3 LAN network sourced from Router R2 is forwarded to R1 instead R3. What could be an issue?

```
R2#traceroute 10.10.12.1 source 10.10.10.1
Type escape sequence to abort.
Tracing the route to 10.10.12.1
VRF info: (vrf in name/id, vrf out name/id)
 1 172.16.14.1 0 msec 1 msec 0 msec
 2 172.16.14.1 1H 1H *
```

R2#

- A. RIPv2 enabled on R3, but R3 LAN network that is not advertised into RIPv2 domain.
- B. RIPv2 routing updates are suppressed between R2 and R3 using passive interface feature.
- C. RIPv2 not enabled on R3.
- D. No issue that is identified; this behavior is normal since default route propagated into RIPv2 domain by Router R1.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

First we should check the routing table of R2 with the “show ip route” command.

R2#show ip route

Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP

D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
 N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
 E1 - OSPF external type 1, E2 - OSPF external type 2
 i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS

level-2

ia - IS-IS inter area, * - candidate default, U - per-user

static route

o - ODR, P - periodic downloaded static route, H - NHRP, l -

LISP

a - application route

+ - replicated route, % - next hop override

Gateway of last resort is 172.16.14.1 to network 0.0.0.0

```

R*  0.0.0.0/0 [120/1] via 172.16.14.1, 00:00:26, Ethernet0/2
    10.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C    10.10.10.0/24 is directly connected, Ethernet0/3
L    10.10.10.1/32 is directly connected, Ethernet0/3
    172.16.0.0/16 is variably subnetted, 5 subnets, 3 masks
C    172.16.11.0/30 is directly connected, Ethernet0/0
L    172.16.11.1/32 is directly connected, Ethernet0/0
C    172.16.14.0/30 is directly connected, Ethernet0/2
L    172.16.14.2/32 is directly connected, Ethernet0/2
R    172.16.16.0/24 [120/1] via 172.16.14.1, 00:00:26, Ethernet0/2
    192.168.100.0/24 is variably subnetted, 2 subnets, 2 masks
C    192.168.100.0/24 is directly connected, Ethernet0/1.100
L    192.168.100.1/32 is directly connected, Ethernet0/1.100
    192.168.200.0/24 is variably subnetted, 2 subnets, 2 masks
C    192.168.200.0/24 is directly connected, Ethernet0/1.200
L    192.168.200.1/32 is directly connected, Ethernet0/1.200
  
```

In this table we cannot find the subnet “10.10.12.0/24” (R3 LAN network) so R2 will use the default route advertised from R1 (with the command “default-information originate” on R1) to reach unknown destination, in this case subnet 10.10.12.0/24 -> R2 will send traffic to 10.10.12.0/24 to R1.

Next we need to find out why R3 did not advertise this subnet to R2. A quick check with the “show running-config” on R3 we will see that R3 was not configured with RIP (no “router rip” section). Therefore we can conclude RIPv2 was not enabled on R3.

QUESTION 87

You work for a company that provides managed network services, and of your real estate clients running a small office is experiencing network issues, Troubleshoot the network issues.

Router R1 connects the main office to internet, and routers R2 and R3 are internal routers NAT is enabled on Router R1.

The routing protocol that is enable between routers R1, R2, and R3 is RIPv2.

R1 sends default route into RIPv2 for internal routers to forward internet traffic to R1.

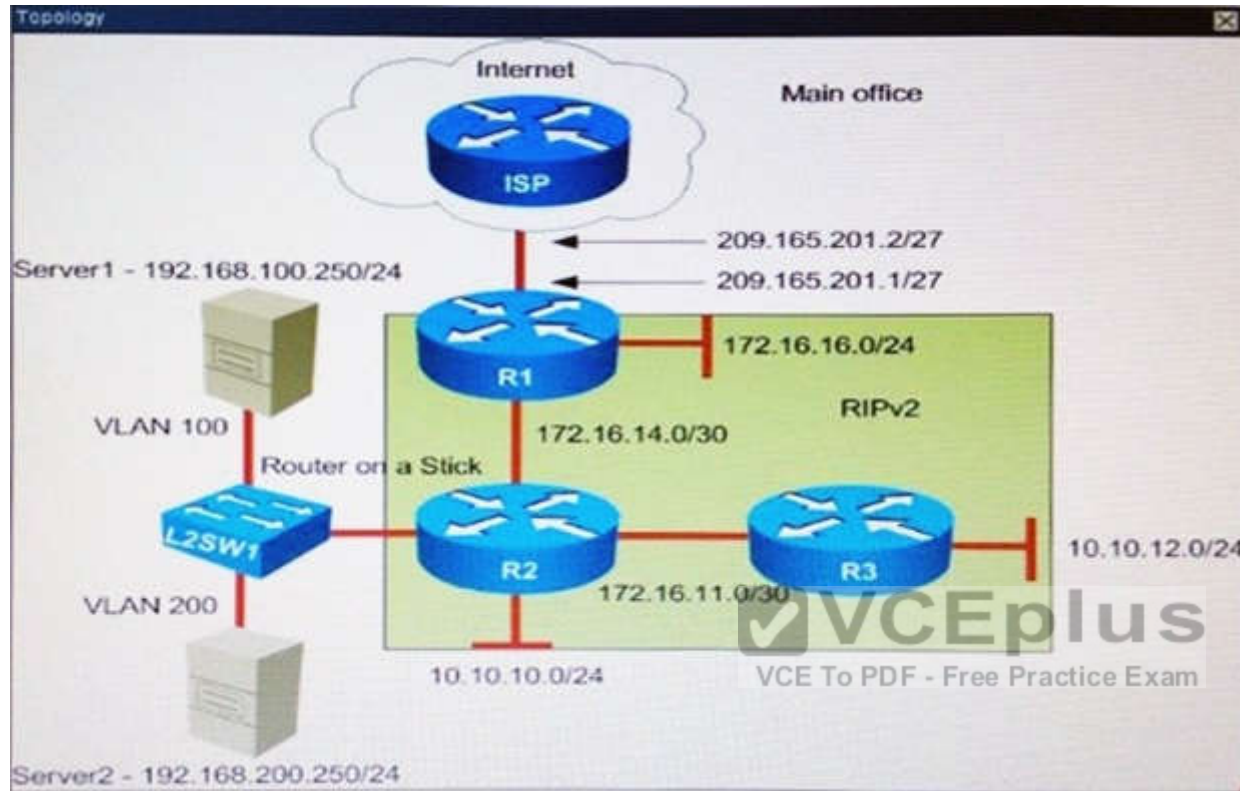
Server1 and Server2 are placed in VLAN 100 and 200 respectively, and dare still running router on stick configuration with router R2.

You have console access on R1, R2, R3, and L2SW1 devices.

Use only show commands to troubleshoot the issues.

Instructions

- Enter IOS commands on the device to verify network operation and answer the multiple-choice questions.
- This task does not require device configuration.
- Click the device icon to gain access to the console of the device. No console or enable passwords are required.
- To access the multiple-choice questions, click the numbered boxes on the left of the top panel.
- There are four multiple-choice questions with this task. Be sure to answer all four questions before clicking Next.



What is the correct statement below after examining the R1 routing table?

- A. Traffic that is destined to 10.10.10.0/24 from R1 LAN network uses static route instead RIPv2 because the static route AD that is configured is less than the AD of RIPv2
- B. Traffic that is destined to 10.10.10.0/24 from R1 LAN network uses RIPv2 instead static route because the static route AD that is configured is higher than the AD of RIPv2
- C. Traffic that is destined to 10.10.10.0/24 from R1 LAN network uses static route instead RIPv2 But the traffic is forwarded to the ISP instead of the internal network.
- D. Traffic that is destined to 10.10.10.0/24 from R1 LAN network uses RIPv2 instead static route because the static route AD that is configured is 255

Correct Answer: B

Section: (none)

Explanation**Explanation/Reference:**

Explanation:

Surely we have to use the “show ip route” command to check the R1 routing table.



```
R1#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B -
BGP
        D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
        N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
        E1 - OSPF external type 1, E2 - OSPF external type 2
        i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS
level-2
        ia - IS-IS inter area, * - candidate default, U - per-user
static route
        o - ODR, P - periodic downloaded static route, H - NHRP, l -
LISP
        a - application route
        + - replicated route, % - next hop override
```

Gateway of last resort is not set

```

10.0.0.0/24 is subnetted, 1 subnets
R       10.10.10.0 [120/1] via 172.16.14.2, 00:00:06, Ethernet0/2
172.16.0.0/16 is variably subnetted, 5 subnets, 3 masks
R       172.16.11.0/30 [120/1] via 172.16.14.2, 00:00:14, Ethernet0/2
C       172.16.14.0/30 is directly connected, Ethernet0/2
L       172.16.14.1/32 is directly connected, Ethernet0/2
C       172.16.16.0/24 is directly connected, Ethernet0/1
L       172.16.16.1/32 is directly connected, Ethernet0/1
R       192.168.100.0/24 [120/1] via 172.16.14.2, 00:00:14, Ethernet0/2
R       192.168.200.0/24 [120/1] via 172.16.14.2, 00:00:14, Ethernet0/2
209.165.201.0/24 is variably subnetted, 2 subnets, 2 masks
C       209.165.201.0/27 is directly connected, Ethernet0/0
L       209.165.201.1/32 is directly connected, Ethernet0/0
```

As we see here, 10.10.10.24 is learned from RIP. Notice that although there is a static route on R1 to this destination (you can check with the “show running-config” on R1 to see the line “ip route 10.10.10.0 255.255.255.0 172.16.14.2 200”), this static route is not installed to the routing table because it is not the best path because the Administrative Distance (AD) of

this static route is 200 while the AD of RIP is 120 -> R1 chose the path with lowest AD so it chose path advertised via RIP.

QUESTION 88

Which feature automatically disables CEF when it is enabled?

- A. RIB
- B. ACL logging
- C. multicast
- D. IP redirects

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

ACL Logging means to use the "log" or "log-input" parameters at the end of the ACL statements. For example: "access- list 100 deny icmp any any echo reply log-input". In either situation, remember that using either of these two parameters disables CEF switching, which seriously impacts the performance of the router.

QUESTION 89

If a router has 3 hosts connected in one port and two other hosts connected in another port, how many broadcast domains are present on the router?

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

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 90

Which feature facilitate the tagging of a specific VLAN?

- A. Routing
- B. Hairpinning

- C. Encapsulation
- D. Switching

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 91

What does split horizon prevent?

- A. routing loops, link state
- B. routing loops, distance vector
- C. switching loops, STP
- D. switching loops, VTP

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 92

Which value to use in HSRP protocol election process ?

- A. interface
- B. virtual IP address
- C. priority
- D. router ID

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 93

Which of the following is needed to be enable back the role of active in HSRP?

- A. preempt
- B. priority

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 94

Which command is used to show the interface status of a router?

- A. show interface status
- B. show ip interface brief
- C. show ip route
- D. show interface



Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 95

Which of the following privilege level is the most secured?

- A. Level 0
- B. Level 1
- C. Level 15
- D. Level 16

Correct Answer: C

Section: (none)

Explanation**Explanation/Reference:****QUESTION 96**

Which IPV6 feature is supported in IPV4 but is not commonly used?

- A. unicast
- B. multicast
- C. anycast
- D. broadcast

Correct Answer: C

Section: (none)

Explanation**Explanation/Reference:****QUESTION 97**

Which range represents the standard access list?

- A. 99
- B. 150
- C. 299
- D. 2000

Correct Answer: A

Section: (none)

Explanation**Explanation/Reference:****QUESTION 98**

What to do when the router password was forgotten?

- A. use default password cisco to reset

- B. access router physically
- C. use ssl/vpn
- D. Type confreg 0x2142 at the rommon 1

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 99

What 8-bit field exists in IP packet for QoS?

- A. Tos Field
- B. DSCP
- C. IP Precedence
- D. Cos

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 100

What feature uses a random time to re-sent a frame?

- A. CSMA/CA
- B. CSMA/CD

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 101

Which mode is compatible with Trunk, Access, and desirable ports?

- A. Trunk Ports
- B. Access Ports
- C. Dynamic Auto
- D. Dynamic Desirable

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 102

If you configure syslog messages without specifying the logging trap level, which log messages will the router send?

- A. 0-4
- B. 0-5
- C. 0-6
- D. 0-2
- E. 0-1



Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 103

Which of the following are found in a TCP header, but not in a UDP header? (Choose three.)

- A. sequence number
- B. acknowledgment number
- C. source port
- D. destination port

- E. window size
- F. checksum

Correct Answer: ABE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 104

When you power up a Cisco router, in what memory is the start-up configuration normally stored in?

- A. RAM
- B. ROM
- C. FLASH
- D. NVRAM

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:



QUESTION 105

Which transport layer protocol is best suited for the transport of VoIP data?

- A. RIP
- B. UDP
- C. TCP
- D. OSPF
- E. HTTP

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 106

An administrator issues the show ip interface s0/0 command and the output displays that interface Serial0/0 is up, line protocol is up. What does "line protocol is up" specifically indicate about the interface?

- A. The cable is attached properly.
- B. CDP has discovered the connected device.
- C. Keepalives are being received on the interface.
- D. A carrier detect signal has been received from the connected device.
- E. IP is correctly configured on the interface.

Correct Answer: C

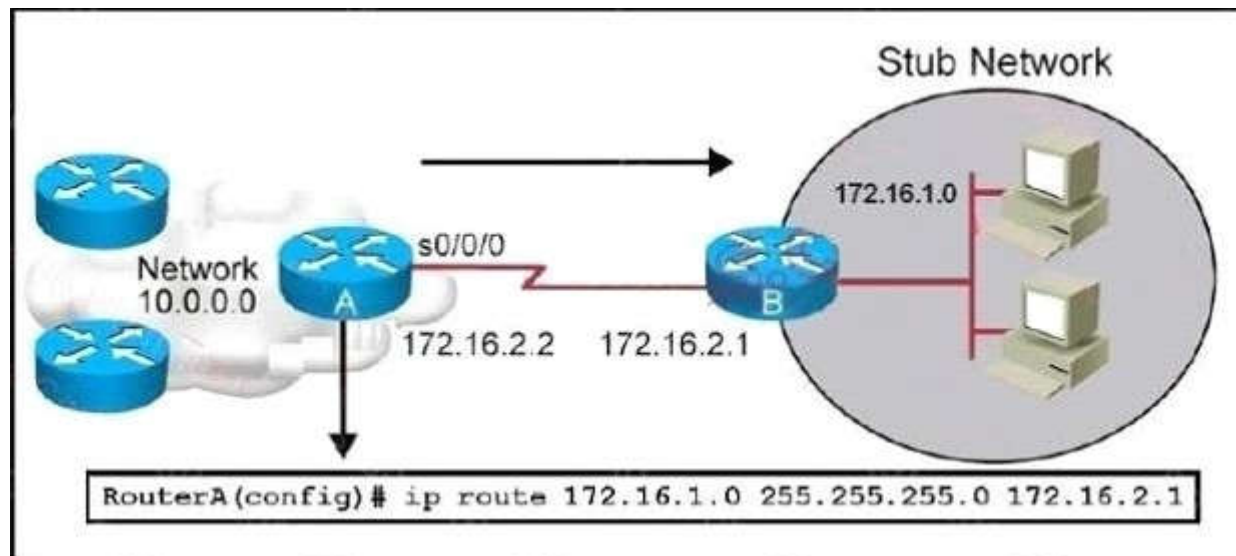
Section: (none)

Explanation

Explanation/Reference:

QUESTION 107

Refer to the exhibit. Which statement is correct regarding the configuration shown?



- A. This will not work as the subnet mask on serial interfaces must be /30.
- B. What is shown as being configured would be considered a default route.
- C. This configuration creates a bidirectional path between RouterA and RouterB.
- D. The command `ip route 172.16.1.0 255.255.255.0 s0/0/0` would provide similar routing functionality.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 108

How can an administrator determine if a router has been configured when it is first powered up?

- A. A configured router prompts for a password.
- B. A configured router goes to the privileged mode prompt.
- C. An unconfigured router goes into the setup dialog.
- D. An unconfigured router goes to the enable mode prompt.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 109

Refer to the exhibit. Which statement is correct regarding the results shown for the `show interface s0/0/0` command?

```
RouterA# show interface s0/0/0
Serial0/0/0 is administratively down, line protocol is down
  Hardware is GT96K Serial
  Internet address is 10.12.12.1/28
  MTU 1500 bytes, BW 1544 Kbit, DLY 20000 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation HDLC, loopback not set
  Keepalive set (10 sec)
  Last input never, output 00:00:14, output hang never
  Last clearing of "show interface" counters 5d15h
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 81071
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
    0 packets input, 0 bytes, 0 no buffer
    Received 0 broadcasts, 0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored, 0 abort
    145 packets output, 5084 bytes, 0 underruns
    0 output errors, 0 collisions, 4 interface resets
    0 output buffer failures, 0 output buffers swapped out
    0 carrier transitions
  DCD=down DSR=up DTR=down RTS=down CTS=down
```

- A. The subnet mask for this interface is 255.255.255.248.
- B. The subnet mask for this interface is 255.255.255.252.
- C. The IP address that is configured on s0/0/0 is a public address.
- D. This interface can be enabled by issuing a no shutdown command.
- E. The default encapsulation protocol for a Cisco serial interface is PPP.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 110

Which of the following commands enables a network administrator to verify the application layer connectivity between source and destination?

- A. ping
- B. telnet
- C. traceroute
- D. verify
- E. trace

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 111

An administrator previously changed the encapsulation on a synchronous serial line and saved the configuration. Now the administrator wants to restore the encapsulation back to the default. What action can the administrator do to return the interface back to its default encapsulation?

- A. Change the encapsulation to ARPA.
- B. Configure the interface for HDLC encapsulation.
- C. Reboot the router and allow it to reload the configuration.
- D. Issue the shutdown then no shutdown commands to reset the encapsulation on the interface.
- E. Remove the cable and plug it back in to allow the router to autonegotiate encapsulation settings.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 112

WAN data link encapsulation types include which of the following? (Choose two.)

- A. T1
- B. Frame Relay
- C. DSL

- D. PPP
- E. ISDN

Correct Answer: BD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 113

Regarding the extended ping command, which of the statements below are true? (Choose three)

- A. The extended ping command is supported from user EXEC mode.
- B. The extended ping command is available from privileged EXEC mode.
- C. With the extended ping command you can specify the TCP and UDP port to be pinged.
- D. With the extended ping command you can specify the timeout value.
- E. With the extended ping command you can specify the datagram size.

Correct Answer: BDE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 114

Which sequence of actions will allow telnetting from a user's PC to a router using TCP/IP?

- A. Connect the PC's COM port to the router's console port using a straight-through cable.
- B. Connect the PC's COM port to the router's console port using a crossover cable.
- C. Connect the PC's COM port to the router's Ethernet port using a straight-through cable.
- D. Connect the PC's Ethernet port to the router's Ethernet port using a crossover cable.
- E. Connect the PC's Ethernet port to the router's Ethernet port using a rollover cable.
- F. Connect the PC's Ethernet port to the router's Ethernet port using a straight-through cable.

Correct Answer: D

Section: (none)

Explanation**Explanation/Reference:****QUESTION 115**

Which Layer 1 devices can be used to enlarge the area covered by a single LAN segment? (Choose two.)

- A. switch
- B. router
- C. NIC
- D. hub
- E. repeater
- F. RJ-45 transceiver

Correct Answer: DE

Section: (none)

Explanation**Explanation/Reference:****QUESTION 116**

When troubleshooting a LAN interface operating in full duplex mode, which error condition can be immediately ruled out?

- A. giants
- B. no buffers
- C. collisions
- D. ignored
- E. dribble condition

Correct Answer: C

Section: (none)

Explanation**Explanation/Reference:****QUESTION 117**

When you use the ping command to send ICMP messages across a network, what's the most common request/reply pair you'll see? (Select one answer choice)

- A. Echo request and Echo reply
- B. ICMP hold and ICMP send
- C. ICMP request and ICMP reply
- D. Echo off and Echo on

Correct Answer: A

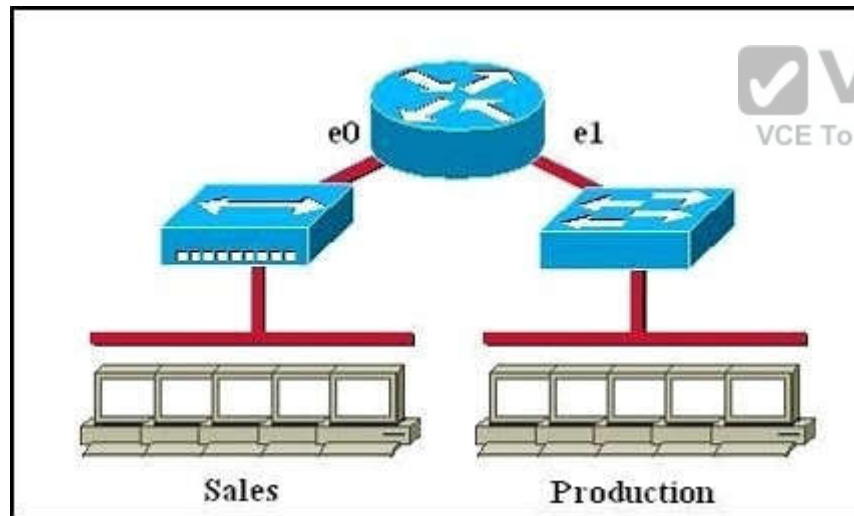
Section: (none)

Explanation

Explanation/Reference:

QUESTION 118

Which of the following statements describe the network shown in the graphic? (Choose two.)



- A. There are two broadcast domains in the network.
- B. There are four broadcast domains in the network.
- C. There are six broadcast domains in the network.
- D. There are four collision domains in the network.

- E. There are five collision domains in the network.
- F. There are seven collision domains in the network.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 119

Which protocol provides best-effort delivery of user data in a network?

- A. TCP
- B. MAC
- C. IP
- D. ARP
- E. SMTP

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 120

If NVRAM lacks boot system commands, where does the router look for the Cisco IOS by default?

- A. ROM
- B. RAM
- C. Flash
- D. bootstrap
- E. startup-config

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:**QUESTION 121**

Assuming a subnet mask of 255.255.248.0, three of the following addresses are valid host addresses. Which are these addresses? (Choose three.)

- A. 172.16.9.0
- B. 172.16.8.0
- C. 172.16.31.0
- D. 172.16.20.0

Correct Answer: ACD

Section: (none)

Explanation

Explanation/Reference:**QUESTION 122**

Which cloud service is typically used to provide DNS and DHCP services to an enterprise?

- A. IaaS
- B. DaaS
- C. SaaS
- D. PaaS

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:**QUESTION 123**

Which two pieces of information can be shared with LLDP TLVs? (Choose two)

- A. device management address.
- B. device type

- C. spanning-tree topology
- D. routing configuration
- E. access-list configuration

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Explanation:

TLV advertises a single type of information such as its device ID, type or management addresses.

QUESTION 124

Which symptom most commonly indicates that two connecting interfaces are configured with a duplex mismatch?

- A. the spanning-tree process shutting down
- B. collisions on the interface
- C. an interface with a down/down status
- D. an interface with an up/down status

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 125

Which statement about upgrading a cisco ios device with TFTP is True?

- A. The Cisco IOS device must be on the same lan as the TFTP server
- B. The operation is performed in passive mode
- C. The operation is performed in an unencrypted format
- D. The operation is performed in active mode

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 126**

Which two statements about UDP are true? (Choose two)

- A. It can transmit data at a rate higher than the path capacity
- B. It uses a three-way handshake to ensure that traffic is transmitted properly
- C. It guarantees packet delivery
- D. it includes protection against duplicate packets
- E. it can be used for multicast and broadcast traffic

Correct Answer: AE

Section: (none)

Explanation

Explanation/Reference:**QUESTION 127**

Which two types of information are held in the mac address table ?

- A. destination ip addresses
- B. protocols
- C. port numbers
- D. mac address
- E. source ip address

Correct Answer: CD

Section: (none)

Explanation

Explanation/Reference:**QUESTION 128**

Which command can you enter in a network switch configuration so that learned mac addresses are saved in configuration as they connect?

- A. Switch(config-if)#Switch port-security

- B. Switch(config-if)#Switch port-security Mac-address sticky
- C. Switch(config-if)#Switch port-security maximum 10
- D. Switch(config-if)#Switch mode access

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 129

Which two security appliances will you use in a network? (Choose two.)

- A. ATM
- B. IDS
- C. IOS
- D. IOX
- E. IPS
- F. SDM



Correct Answer: BE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 130

Which NTP type designates a router without an external referee clock as an authoritative time source ?

- A. Client
- B. Server
- C. peer
- D. master

Correct Answer: D

Section: (none)

Explanation**Explanation/Reference:****QUESTION 131**

Which command can you enter to re enable cisco discovery protocol on a local router after it has been disabled?

- A. Router (config)# cdp run
- B. Router (config-if)# cdp run
- C. Router (config)# cdp enable
- D. Router (config-if)# cdp enable

Correct Answer: A

Section: (none)

Explanation**Explanation/Reference:****QUESTION 132**

Which three options are switchport configuration that can always avoid duplex mismatch errors between two switches? (Choose three.)

- A. Set both sides of the connection to half duplex.
- B. Set one side of the connection to auto-negotiate and the other side to full duplex.
- C. Set both sides of the connection to auto-negotiate.
- D. Set one side of the connection to auto-negotiate and the other side to half duplex.
- E. Set one side of the connection to full duplex and the other side to half duplex.
- F. Set both sides of the connection to full duplex.

Correct Answer: ACF

Section: (none)

Explanation**Explanation/Reference:****QUESTION 133**

In which CLI configuration mode can you configure the hostname of a device?

- A. line mode
- B. interface mode
- C. global mode
- D. router mode

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 134

What are the two minimum required components of a DHCP binding? (Choose two.)

- A. a DHCP pool
- B. an exclusion list
- C. a hardware address
- D. an IP address
- E. an ip-helper statement



Correct Answer: CD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 135

Which Two options are features of the extended ping command?

- A. it can send packets from a specified interface or ip address
- B. it can resolve the destination host name
- C. it can ping multiple hosts at the same time
- D. it can count the number of hops to the remote host
- E. it can send a specified number of packets

Correct Answer: AE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 136

For which two protocols can PortFast alleviate potential host startup issues? (Choose two.)

- A. DHCP
- B. DNS
- C. OSPF
- D. RIP
- E. CDP

Correct Answer: AE

Section: (none)

Explanation

Explanation/Reference:



QUESTION 137

Which major ipv6 address type is supported in ipv4 but rarely used ?

- A. Broadcast
- B. multicast
- C. unicast
- D. anycast

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 138

Which two steps must you perform to enable router-on-a-stick on a switch? (Choose two.)

- A. Configure an IP route to the VLAN destination network.
- B. Connect the Router to a trunk port.
- C. Configure full duplex.
- D. Configure the subinterface number exactly the same as the matching VLAN.
- E. Assign the access port to a VLAN.

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

QUESTION 139

Which two statements about syslog logging are true? (Choose two.)

- A. Messages are stored external to the device.
- B. The size of the log file is dependent on the resources of the device.
- C. Syslog logging is disabled by default.
- D. Messages can be erased when the device reboots.
- E. Messages are stored in the internal memory of the device.

Correct Answer: AD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 140

Which address block identifies all link-local address?

- A. fc00::/7
- B. fc00::/8
- C. fe80::/10

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 141

Which two options are fields in an ethernet frame ? (Choose two)

- A. destination ip address
- B. source ip address
- C. type
- D. frame check sequence
- E. header

Correct Answer: AB

Section: (none)

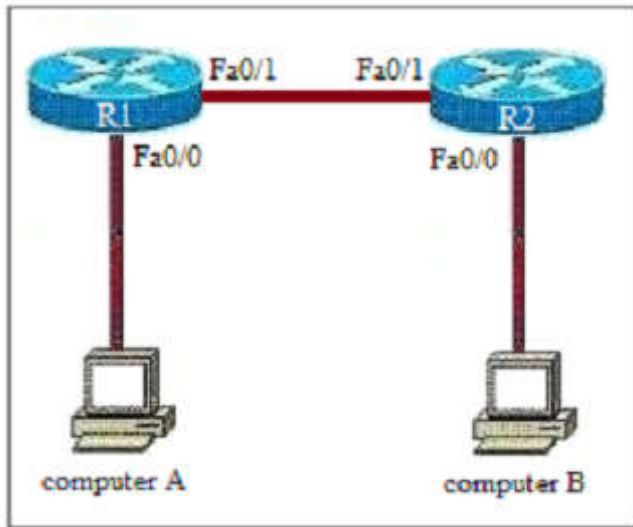
Explanation

Explanation/Reference:



QUESTION 142

Refer to Exhibit. If Computer A is sending traffic to computer B, which option is the source ip address when a packet leaves R1 on interface F0/1?



- A. IP address of the R2 interface F0/1
- B. Ip address of computer B
- C. Ip address of R1 interface F0/1
- D. Ip address of Computer A

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 143

For which two reasons was RFC 1918 address space define? (Choose two)

- A. to preserve public IPv4 address space
- B. to reduce the occurrence of overlapping IP addresses
- C. to preserve public IPv6 address space
- D. reduce the size of ISP routing tables
- E. to support the NAT protocol

Correct Answer: DE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 144

In which two circumstances are private IPv4 addresses appropriate? (Choose two)

- A. on internal hosts that stream data solely to external resources
- B. on hosts that communicates only with other internal hosts
- C. on the public-facing interface of a firewall
- D. on hosts that require minimal access to external resources
- E. to allow hosts inside an enterprise to communicate in both directions with hosts outside the enterprise

Correct Answer: BD

Section: (none)

Explanation

Explanation/Reference:



QUESTION 145

Which type of routing protocol operates by using first information from each device peers?

- A. link-state protocols
- B. distance-vector protocols
- C. path-vector protocols
- D. exterior gateway protocols

Correct Answer: A

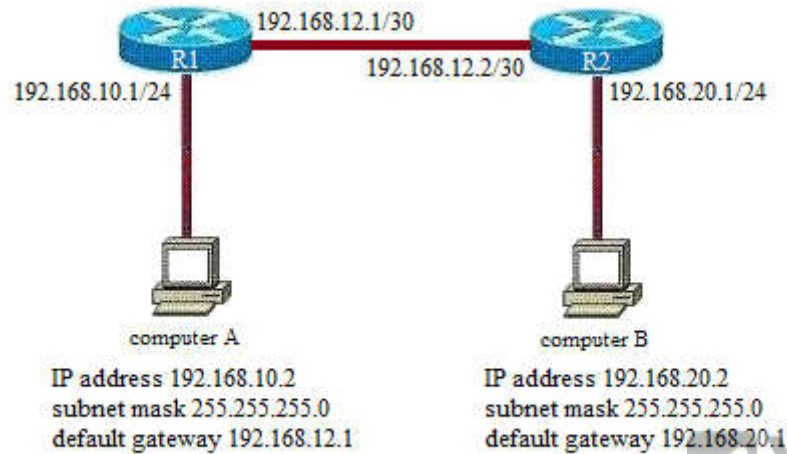
Section: (none)

Explanation

Explanation/Reference:

QUESTION 146

Refer to the exhibit. You have determined that computer A cannot ping computer B. Which reason for the problem is most likely true?



- A. The computer A subnet mask is incorrect.
- B. The computer B subnet mask is incorrect.
- C. The computer B default gateway address is incorrect.
- D. The computer A default gateway address is incorrect.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 147

Which two statements about access points are true? (Choose Two)

- A. They can provide access within enterprises and to the public.

- B. in Most cases, they are physically connected to other network devices to provide network connectivity.
- C. They can protect a network from internal and external threats.
- D. Most access points provide Wi-Fi and Bluetooth connectivity.
- E. They must be hardwired to a modem.

Correct Answer: BD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 148

When is a routing table entry identified as directly connected?

- A. when the local router is in use as the network default gateway
- B. when the network resides on a remote router that is physically connected to the local router
- C. when an interface on the route is configure with an ip address and enabled
- D. when the route is statically assigned to reach a specific network

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 149

Which type of cable must you use to connect two device with mdi interfaces?

- A. rolled
- B. crosseover
- C. crossed
- D. straight through

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:**QUESTION 150**

Which statements is true about Router on Stick?

- A. When a router have multiple subnets on a single physical link.
- B. When a router have single subnet on multiple physical links.
- C. When a router have multiple interface on single physical links.
- D. When a router have single interface on multiple physical links

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 151**

Which two options are the best reasons to use an ipv4 private ip space?

- A. to manage routing overhead
- B. to implement nat
- C. to connect applications
- D. to enable intra-enterprise communication
- E. to conserve global address space

Correct Answer: DE

Section: (none)

Explanation

Explanation/Reference:**QUESTION 152**

Which two options are benefits of dhcp snooping?

- A. it prevents dhcp reservations

- B. it simplifies the process of adding DHCP Servers to the network
- C. it prevents the deployment of rogue DHCP Servers
- D. it prevents static reservations
- E. it Tracks the location of hosts in the network

Correct Answer: CE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 153

Which three options are fields in a basic ethernet data frame?

- A. preamble
- B. time to live
- C. version
- D. header checksum
- E. length type
- F. frame check sequence



Correct Answer: AEF

Section: (none)

Explanation

Explanation/Reference:

QUESTION 154

Which two statements about the extended traceroute command are true? (Choose two.)

- A. It can be repeated automatically at a specified interval.
- B. It can validate the reply data.
- C. It can use a specified TTL value.
- D. It can send packets from a specified interface or IP address.
- E. It can use a specified ToS.

Correct Answer: CD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 155

Which functionality does split horizon provide?

- A. it Prevents routing loops in distance vector protocols
- B. it Prevents switching loops in distance vector protocols
- C. it Prevents switching loops in link-state protocols
- D. it Prevents routing loops in link-state protocols

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 156

Which two statements about RIPv2 are true? (Choose two)

- A. It must be manually enabled after RIP is configured as the routing protocol
- B. It uses multicast address 224.0.0.2 to share routing information between peers
- C. its default administrative distances 120
- D. It is a link-state routing protocol
- E. It is an EGP routing protocol

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

QUESTION 157

Which command can be used from a router to verify the Layer 3 path to a host?

- A. tracert address
- B. traceroute address
- C. telnet address
- D. ssh address

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 158

Which statement about Cisco Discovery Protocol is true?

- A. It is a Cisco-proprietary protocol.
- B. It runs on the network layer.
- C. It can discover information from routers, firewalls, and switches.
- D. It runs on the physical layer and the data link layer.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 159

Under which circumstance is a router on a stick most appropriate?

- A. When the router must route a single across multiple physical links.
- B. When the router must route multiple subnets across multiple physical links.
- C. When the router must route a single across single physical links.
- D. When the router must route multiple subnets across single physical links.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 160

Dhcp client in the back can not communicate with hosts in the outside of their subnet?

```
***ip dhcp pool my pool*****  
***network 192.168.10.0/27***  
***domain name cisco.com***  
***name server some ip***
```

- A. need to activate dhcp pool
- B. need to configure default gateway
- C. other option
- D. other option

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:



QUESTION 161

What command can you enter to configure the switch as an authoritative ntp server with site id : 15122473?

- A. Switch(config)#ntp master 3
- B. Switch(config)#ntp peer IP 193.168.2.2
- C. Switch(config)#ntp server IP 193.168.22
- D. Switch(config)#ntp source IP 193.168.2.2

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 162

Router R1 has a static route that is configured to a destination network. A directly connected interface is configured with an IP address in the same destination network. Which statement about R1 is true?

- A. It refuses to advertise the dynamic route to other neighbors
- B. It sends a withdrawal signal to the neighboring router
- C. It disables the routing protocol
- D. It prefers the static route

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 163

To enable routing on a stick on a router subinterface, which two steps must you perform? Choose two.

- A. configure full duplex and speed
- B. configure a default to route traffic between subinterfaces
- C. configure the subinterface with an IP address
- D. configure encapsulation dot1q
- E. configure an IP route to the VLAN destination network

Correct Answer: CD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 164

Which command can you enter to determine the addresses that have been assigned on a DHCP server?

- A. Show ip DHCP database.
- B. Show ip DHCP pool.

- C. Show ip DHCP binding.
- D. Show ip DHCP server statistic.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 165

Which statement about recovering a password on a cisco router is true?

- A. it requires physical access to the router
- B. the default reset password is cisco
- C. a factory reset is required if you forget the password
- D. it requires a secure SSL/VPN connection

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 166

While troubleshooting a DHCP client that is behaving erratically, you discover that the client has been assigned the same IP address as a printer that is a static IP address. Which option is the best way to resolve the problem?

- A. Configure a static route to the client.
- B. Assign the client the same IP address as the router.
- C. Move the client to another IP subnet
- D. Move the printer to another IP subnet.
- E. Reserve the printer IP address.

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:**QUESTION 167**

Which symptom can cause duplex mismatch problem?

- A. no earner
- B. collisions on interface
- C. giants
- D. CRC errors

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:**QUESTION 168**

Which type of routing protocol operates by exchanging the entire routing information ?

- A. distance vector protocols
- B. link state protocols
- C. path vector protocols
- D. exterior gateway protocols

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 169**

Which port security violation mode allows traffic from valid mac address to pass but block traffic from invalid mac address?

- A. protect
- B. shutdown
- C. shutdown vlan

D. restrict

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 170

Which IPsec security protocol should be used when confidentiality is required?

- A. MD5
- B. PSK
- C. AH
- D. ESP

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:



QUESTION 171

Which definition of a host route is true?

- A. A route that is manually configured
- B. A route used when a destination route is missing.
- C. A route to the exact /32 destination address
- D. Dynamic route learned from the server.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 172

Which statement about DHCP snooping is true?

- A. it blocks traffic from DHCP servers on untrusted interfaces.
- B. it can be configured on switches and routers.
- C. it allows packets from untrusted ports if their source MAC address is found in the binding table.
- D. it uses DHCPDiscover packets to identify DHCP servers.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 173

Which three commands are required to enable NTP authentication on a Cisco router? (Choose three)

- A. ntp peer
- B. ntp max-associations
- C. ntp authenticate
- D. ntp trusted-key
- E. ntp authentication-key
- F. ntp refclock



Correct Answer: CDE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 174

Which IPv6 routing protocol uses multicast group FF02::9 to send updates?

- A. static
- B. RIPng
- C. OSPFv3

D. IS-IS for IPv6

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 175

Which three statements about IPv6 address fd14:920b:f83d:4079::/64 are true? (Choose three)

- A. The subnet ID is 14920bf83d
- B. The subnet ID is 4079
- C. The global ID is 14920bf83d
- D. The address is a link-local address
- E. The global ID is 4079
- F. The address is a unique local address

Correct Answer: BCF

Section: (none)

Explanation

Explanation/Reference:

QUESTION 176

Which three statements about DWDM are true? (Choose three)

- A. It allows a single strand of fiber to support bidirectional communications
- B. It is used for long-distance and submarine cable systems
- C. It can multiplex up to 256 channels on a single fiber
- D. It supports both the SDH and SONET standards
- E. Each channel can carry up to a 1-Gbps signal
- F. It supports simplex communications over multiple strands of fiber

Correct Answer: CDE

Section: (none)

Explanation**Explanation/Reference:****QUESTION 177**

Which tunneling mechanism embeds an IPv4 address within an IPv6 address?

- A. Teredo
- B. 6to4
- C. 4to6
- D. GRE
- E. ISATAP

Correct Answer: B

Section: (none)

Explanation**Explanation/Reference:****QUESTION 178**

Which protocol does ipv6 use to discover other ipv6 nodes on the same segment?

- A. CLNS
- B. TCPv6
- C. NHRP
- D. NDP
- E. ARP

Correct Answer: D

Section: (none)

Explanation**Explanation/Reference:****QUESTION 179**

What is the most efficient subnet mask for a point to point ipv6 connection?

- A. /127
- B. /128
- C. /64
- D. /48
- E. /32

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 180

Which type of secure MAC address must be configured manually?

- A. dynamic
- B. bia
- C. static
- D. sticky



Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 181

Where does a switch maintain DHCP snooping information ?

- A. in the MAC address table
- B. in the CAM table
- C. in the DHCP binding database
- D. in the VLAN database

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 182

Which two statements about IPv6 address 2002:ab10:beef::/48 are true?(choose two)

- A. The embedded IPv4 address can be globally routed.
- B. It is used for an ISATAP tunnel
- C. The embedded IPv4 address is an RFC 1918 address
- D. The MAC address 20:02:b0:10:be:ef is embedded into the IPv6 address
- E. It is used for a 6to4 tunnel

Correct Answer: AE

Section: (none)

Explanation

Explanation/Reference:



QUESTION 183

If a router has four interfaces and each interface is connected to four switches, how many broadcast domains are present on the router?

- A. 1
- B. 2
- C. 4
- D. 8

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 184

What are three parts of an IPv6 global unicast address? (Choose three.)

- A. an interface ID that is used to identify the local host on the network
- B. an interface ID that is used to identify the local network for a particular host.
- C. a subnet ID that is used to identify networks inside of the local enterprise site
- D. a global routing prefix that is used to identify the network portion of the address that has been provided by an ISP
- E. a global routing prefix that is used to identify the portion of the network address provided by a local administrator

Correct Answer: ACD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 185

What is true about Cisco Discovery Protocol?

- A. it discovers the routers, switches and gateways.
- B. it is network layer protocol
- C. it is physical and data link layer protocol
- D. it is proprietary protocol



Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 186

What layer of the OSI Model is included in TCP/IP Model's INTERNET layer?

- A. Application
- B. Session
- C. Data Link
- D. Presentation
- E. Network

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

QUESTION 187

What are types of IPv6 static routes? (Choose Three.)

- A. Recursive routes
- B. Directly connected routes
- C. Fully specified routes
- D. Advertised routes
- E. Virtual links
- F. Redistributed routes

Correct Answer: ABC

Section: (none)

Explanation

Explanation/Reference:



QUESTION 188

How to configure RIPv2? (Choose Two.)

- A. Enable RIP
- B. Connect RIP to WAN interface
- C. Enable no auto-summary
- D. Enable authentication

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

QUESTION 189

Which value must the device send as its username when using CHAP to authenticate with the remote peer site id:17604704 over a PPP link?

- A. The automatically generated user name
- B. The local host name
- C. The user name defined by the administrator
- D. The host name of the remote device.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 190

Which statement about IPv6 link-local addresses is true ?

- A. They must be configured on all IPv6 interface
- B. They must be globally unique
- C. They must be manually configured
- D. They are advertised globally on the network



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 191

Which configuration can be used with PAT to allow multiple inside address to be translated to a single outside address?

- A. Dynamic Routing
- B. DNS
- C. Preempt
- D. overload

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 192

Which command can you enter to create a NAT pool of 6 addresses?

- A. Router(config)#ip nat pool test 175.17.12.69 175.17.12.74 prefix-length 24
- B. Router(config)#ip nat pool test 175.17.12.69 175.17.13.74 prefix-length 16
- C. Router(config)#ip nat pool test 175.17.12.66 175.17.12.72 prefix-length 8
- D. Router(config)#ip nat pool test 175.17.12.69 175.17.12.76 prefix-length 8

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 193

Which IEEE mechanism is responsible for the authentication of devices when they attempt to connect to a local network?

- A. 802.1x
- B. 802.11
- C. 802.2x
- D. 802.3x

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 194

Which two statements about floating static routes are true? (Choose two)

- A. They are routes to the exact /32 destination address
- B. They are used when a route to the destination network is missing
- C. They have a higher administrative distance than the default static route administrative distance
- D. They are used as back-up routes when the primary route goes down
- E. They are dynamic routes that are learned from a server

Correct Answer: CD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 195

Which networking Technology is currently recognized as the standard for computer networking?

- A. System network architecture
- B. Transmission control protocol/Internet protocol
- C. Open system Interconnect
- D. Open network architecture



Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 196

Which command you enter on a switch to display the ip address associated with connected devices?

- A. Show cdp neighbors detail
- B. Show cdp neighbor
- C. Show cdp interface
- D. Show cdp traffic

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 197

Which Type of ipv6 unicast ip address is reachable across the internet?

- A. Unique Local
- B. Compatible
- C. Link local
- D. Globa

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:



QUESTION 198

Which value indicate the distance from the ntp authoritative time source?

- A. priority
- B. location
- C. layer
- D. stratum

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 199

If you want multiple hosts on a network, where do you configure the setting?

- A. in the IP protocol
- B. in the multicast interface
- C. in the serial interface
- D. in the global configuration

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 200

What will you do if you forgot the password of your router?

- A. remote connection
- B. physical connection is needed

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:



QUESTION 201

Where information about untrusted hosts are stored?

- A. CAM table
- B. Trunk table
- C. MAC table
- D. binding database

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 202

In which two situations should you use out-of-band management?

- A. when a network device fails to forward packets
- B. when you require ROMMON access
- C. when management applications need concurrent access to the device
- D. when you require administrator access from multiple locations
- E. when the control plane fails to respond

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

QUESTION 203

What happens when an 802.11a node broadcasts within the range of an 802.11g access point?

- A. The access point transmits, but the node is unable to receive.
- B. A connection occurs
- C. Both the node and the access point are unable to transmit.
- D. The node transmits, but the access point is unable to receive.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 204

Which two command can you enter to display the current time sources statistics on devices ? (Choose two.)

- A. Show ntp associations.
- B. Show clock details
- C. Show clock.

- D. Show time.
- E. Show ntp status

Correct Answer: AE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 205

Which three encapsulation layers in the OSI model are combined into the TCP/IP application layer? (Choose three)

- A. Session
- B. transport
- C. presentation
- D. application
- E. data-link
- F. network

Correct Answer: ACD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 206

Which effect of the passive-interface command on R1 is true?

R1
Interface FastEthernet0/0
description site id:14254489
ip address 172.16.0.1 255.255.0.0

Interface FastEthernet0/1
description site id:14254489
ip address 172.17.0.1 255.255.0.0

router rip

```
passive-interface FastEthernet0/0  
network 172.16.0.0  
network 172.17.0.0  
version 2
```

- A. It prevents interface Fa0/0 from sending updates.
- B. Interface Fa 0/0 operates in RIPv1 mode.
- C. It removes the 172.16.0.0 network from all updates on all interfaces on R1.
- D. It removes the 172.16.0.0 network from all updates on all interfaces on R1.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 207

What is the command to see assigned address in DHCP?

- A. show ip DHCP statistic
- B. show ip dhcp pool
- C. show ip dhcp binding
- D. show ip dhcp database



Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 208

DRAG DROP

Drag and drop each broadcast IP address on the left to the Broadcast Address column on the right. Not all options are used.

Select and Place:

Answer Area

10.1.255.254/24	
10.63.255.255/10	
172.16.255.39/29	
172.20.255.255/16	
192.168.1.10/24	
192.168.255.127/25	

Correct Answer:

Answer Area

10.1.255.254/24	10.63.255.255/10
	172.16.255.39/29
	172.20.255.255/16
	192.168.255.127/25
192.168.1.10/24	

Section: (none)
Explanation

Explanation/Reference:

QUESTION 209

DRAG DROP

Drag and drop the DNS lookup components from the left onto the correct functions on the right.

Select and Place:

Answer Area

cache	local database of address mappings that improves name-resolution performance
DNS	service that maps hostnames to IP addresses
domain	disable DNS services on a Cisco device
name resolver	in response to client requests, queries a name server for IP address information
no ip domain lookup	component of a URL that indicates the location or organization type, such as .com or .edu

Correct Answer:

Answer Area

	cache
	DNS
	no ip domain lookup
	name resolver
	domain

Section: (none)

Explanation

Explanation/Reference:

QUESTION 210

DRAG DROP

Drag and drop the MAC address types from the left onto the correct descriptions on the right?

Select and Place:

Answer Area

dynamic secure MAC address	cleared from the CAM table when the switch reboots
nonsecure MAC address	configured with the switchport port-secure mac-address command
static secure MAC address	dynamically learned addresses that can be retained permanently
sticky MAC address	requires access VLAN configuration only

Correct Answer:

Answer Area

	nonsecure MAC address
	sticky MAC address
	dynamic secure MAC address
	static secure MAC address

Section: (none)
Explanation

Explanation/Reference:

QUESTION 211

DRAG DROP

Drag and Drop the descriptions of IP protocol transmissions from the left onto the correct IP traffic types on the right.

Select and Place:

Answer Area

TCP

It transmits packets individually.

It sends transmissions in sequence.

It transmits packets as a stream.

It uses a lower transmission rate to ensure reliability.

It uses a higher transmission rate to support latency-sensitive applications.

Transmissions include an 8-byte header.

UDP

Correct Answer:

Answer Area	
	TCP
	It sends transmissions in sequence.
	It uses a lower transmission rate to ensure reliability.
	It transmits packets individually.
	UDP
	It transmits packets as a stream.
	It uses a higher transmission rate to support latency-sensitive applications.
	Transmissions include an 8-byte header.

Section: (none)
Explanation

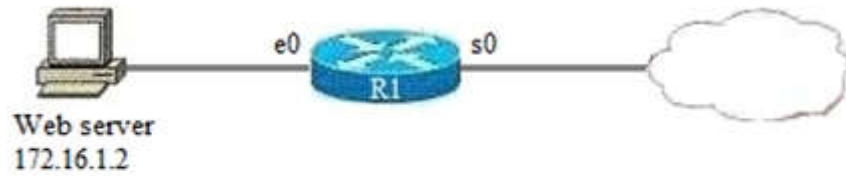
Explanation/Reference:

QUESTION 212

DRAG DROP

Refer to the exhibit. You are configuring the router to provide Static NAT for the web server.

Drag and drop the configuration commands from left onto the letters that correspond to its position in the configuration on the right.



interface Ethernet0

A

B

interface Serial0

C

D

E

F

access-list 1 permit 172.16.1.0.0.0.0.255

Select and Place:

Answer Area

ip address 172.16.1.1 255.255.255.0	position A
ip address 45.83.2.214 255.255.255.240	position B
ip nat inside	position C
ip nat inside source list 1 interface s0 overload	position D
ip nat inside source static tcp 172.16.1.2 80 45.83.2.214 80 extendable	position E
ip nat outside	position F

Correct Answer:

Answer Area

	ip address 172.16.1.1 255.255.255.0
	ip nat inside
	ip address 45.83.2.214 255.255.255.240
	ip nat outside
	ip nat inside source static tcp 172.16.1.2 80 45.83.2.214 80 extendable
	ip nat inside source list 1 interface s0 overload

Section: (none)

Explanation

Explanation/Reference: