100-105

Number: 100-105
Passing Score: 800
Time Limit: 120 min
File Version: 1

100-105

Interconnecting Cisco Networking Devices Part 1 (ICND)

Exam A

QUESTION 1
Which address type does a switch use to make selective forwarding decisions?

A. destination IP address
B. source MAC address
C. source IP address
D. source and destination IP address
E. destination MAC address

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:

QUESTION 2
In which two ways does TCP differ from UDP? (Choose two.)

A. TCP provides synchronized communication.
B. TCP segments are essentially datagrams.
C. TCP provides sequence numbering of packets.
D. TCP uses broadcast delivery.
E. TCP provides best effort delivery.

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:

QUESTION 3
Under which circumstance should a network administrator implement one-way NAT?

A. when the network must route UDP traffic
B. when traffic that originates outside the network must be routed to internal hosts

C. when traffic that originates inside the network must be routed to internal hosts
D. when the network has few public IP addresses and many private IP addresses require outside access

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 4
Which destination IP address can a host use to send one message to multiple devices across different subnets?

A. 172.20.1.0
B. 127.0.0.1
C. 192.168.0.119
D. 239.255.0.1

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 5
Which option must occur before a workstation can exchange HTTP packets with a web server?

A. An ICMP connection must be established between the workstation and the web server.
B. A UDP connection must be established between the workstation and its default gateway.
C. A TCP connection must be established between the workstation and its default gateway.
D. A UDP connection must be established between the workstation and the web server.
E. An ICMP connection must be established between the workstation and its default gateway.
F. A TCP connection must be established between the workstation and the web server.

Correct Answer: F
Section: (none)
Explanation

Explanation/Reference:

QUESTION 6
Refer to the exhibit.

```
Router#configure terminal
Router(config) #vlan 10
Router(config-vlan) #do show vlan
```

Which statement describes the effect of this configuration?

A. The VLAN 10 VTP configuration is displayed.
B. The VLAN 10 spanning-tree output is displayed.
C. The VLAN 10 configuration is saved when the router exits VLAN configuration mode.
D. VLAN 10 is added to the VLAN database.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 7
Which statement about routing protocols is true?

A. Link-state routing protocols choose a path by the number of hops to the destination.
B. OSPF is a link-state routing protocol.
C. Distance-vector routing protocols use the Shortest Path First algorithm.
D. IS-IS is a distance-vector routing protocol.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

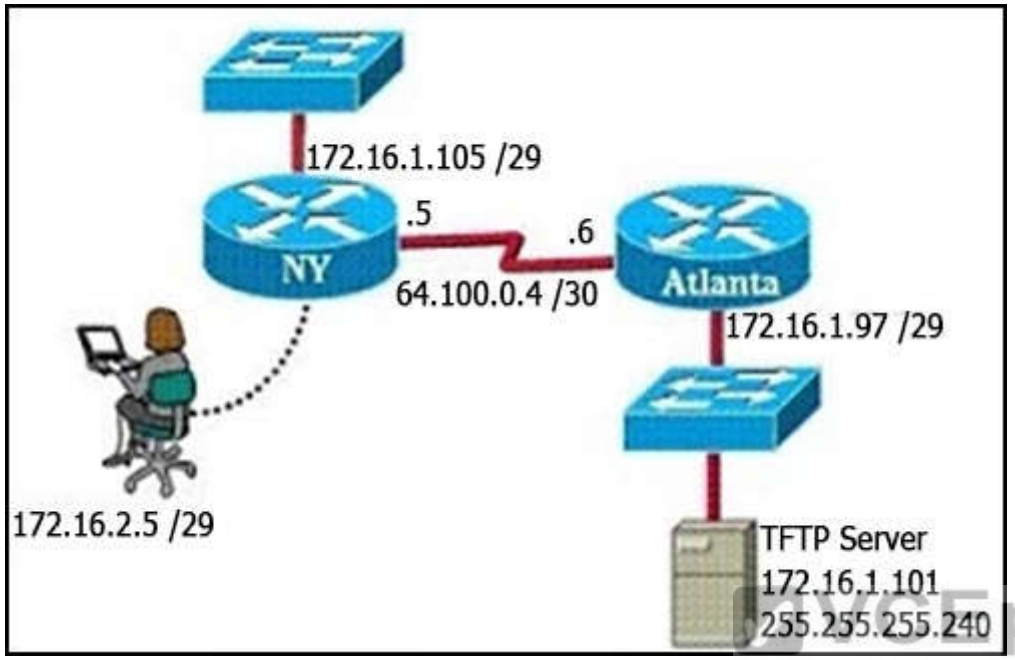
QUESTION 8
Which route source code represents the routing protocol with a default administrative distance of 90 in the routing table?

A. S
B. E
C. D
D. R
E. O

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 9
Refer to the exhibit.



A TFTP server has recently been instated in the Atlanta office. The network administrator is located in the NY office and has made a console connection to the NY router. After establishing the connection they are unable to backup the configuration file and iOS of the NY router to the TFTP server. What is the cause of this problem?

A. The TFTP server has an incorrect subnet mask.
B. The TFTP server has an incorrect IP address.
C. The network administrator computer has an incorrect IP address.
D. The NY router has an incorrect subnet mask.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 10
On a Cisco switch, which protocol determines if an attached VoIP phone is from Cisco or from another vendor?

A. CDP
B. RTP
C. UDP
D. TCP

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 11
Which statement about a router on a stick is true?

A. Its data plane routes traffic for a single VLAN over two or more switches.
B. It uses multiple subinterfaces of a single interface to encapsulate traffic for different VLANs on the same subnet
C. It requires the native VLAN to be disabled.
D. It uses multiple subinterfaces of a single interface to encapsulate traffic for different VLANs.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 12
Which routing protocol has the smallest default administrative distance?

A. IBGP
B. OSPF
C. IS-IS
D. EIGRP
E. RIP

Correct Answer: D

Section: (none)
Explanation

Explanation/Reference:

QUESTION 13
Two hosts are attached to a switch with the default configuration. Which statement about the configuration is true?

A. IP routing must be enabled to allow the two hosts to communicate.
B. The two hosts are in the same broadcast domain.
C. The switch must be configured with a VLAN to allow the two hosts to communicate.
D. Port security prevents the hosts from connecting to the switch.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 14
Which MTU size can cause a baby giant error?

A. 1500
B. 9216
C. 1600
D. 1518

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 15
Which statement about static routes is true?

A. The source interface can be configured to make routing decisions.
B. A subnet mask is entered for the next-hop address.
C. The subnet mask is 255.255.255.0 by default.
D. The exit interface can be specified to indicate where the packets will be routed.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 16
Which two statements describe the IP address 10.16.3.65/23? (Choose two.)

A. The lowest host address in the subnet is 10.16.2.1 255.255.254.0.
B. The last valid host address in the subnet is 10.16.2.254 255.255.254.0.
C. The network is not subnetted.
D. The broadcast address of the subnet is 10.16.3.255 255.255.254.0.
E. The subnet address is 10.16.3.0 255.255.254.0.

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:

QUESTION 17
Which NAT type is used to translate a single inside address to a single outside address?

A. dynamic NAT
B. NAT overload
C. PAT
D. static NAT

Correct Answer: D
Section: (none)

Explanation

Explanation/Reference:

QUESTION 18
Which option is a valid hostname for a switch?

A. 5witch-Cisco
B. Switch-Cisco!
C. 5witchCisc0
D. SwitchCisc0

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 19
Which function enables an administrator to route multiple VLANs on a router?

A. IEEE 802.1X
B. HSRP
C. port channel
D. router on a stick

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 20
Which NTP command configures the local device as an NTP reference clock source?

A. ntp peer

B. ntp broadcast
C. ntp master
D. ntp server

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 21
Which RFC was created to alleviate the depletion of IPv4 public addresses?

A. RFC 4193
B. RFC 1519
C. RFC 1518
D. RFC 1918

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 22
Instructions
For both the Router and the Switch the simulated console mode needs to start and remain in enabled mode.

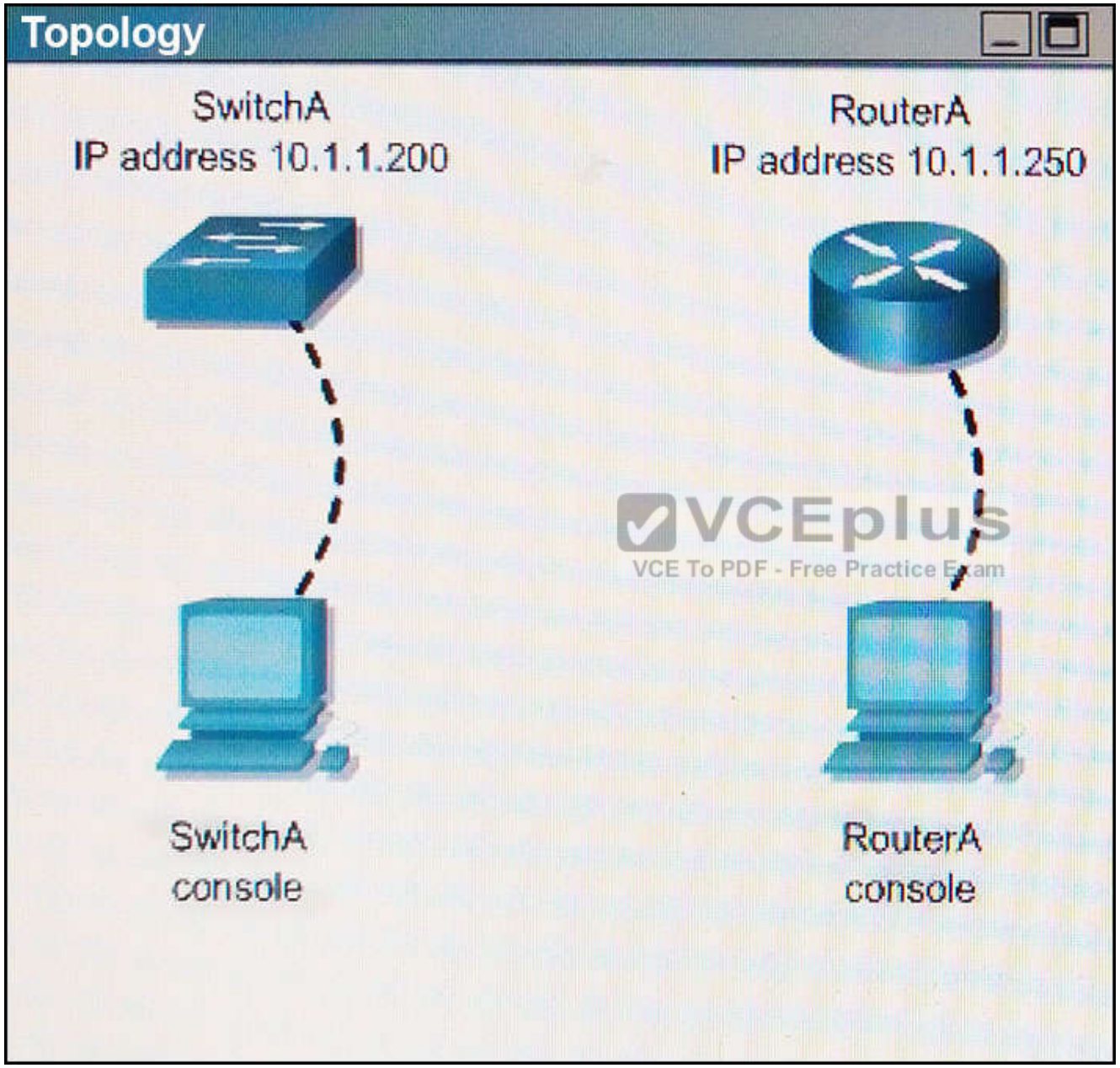
RouterA and SwitchA have been configured to operate in a private network which will connect to the Internet. You have been asked to review the configuration prior to cabling and implementation.

This task requires the use of various IOS commands to access and inspect the running configuration of RouterA and SwitchA. No configuration changes are necessary.

You will connect to RouterA and SwilchA via the console devices that are attached to each.

There are 4 multiple-choice questions with this task. Be sure to answer all of them before leaving this item. In order to score the maximum points you will need to have accessed both SwitchA and RouterA.

NOTE: The configuration command has been disabled for both the router and switch in this simulation.



Which two of the following are true regarding the configuration of RouterA? (Choose two.)

A. at least 5 simultaneous remote connections are possible
B. only telnet protocol connections to RouterA are supported
C. remote connections to RouterA using telnet will succeed
D. console line connections will never time out due to inactivity
E. since DHCP is not used on Fa0/1 there is no need to use the NAT protocol

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Here is the RouterA configuration:
for Router
!
!
no service password-encryption
!
hostname Router1
enable secret 5 $1$14mlkm52….
ip domain-name cisco.com
ip ssh version 2
!
!
username ciscouser password 0 cisco
banner login ^c
********** welcome to router1 If you encountered any problem, please consult the administrator ********** ^c
!
line con 0
password cisco
line vty 0 4
password 4thfcvcf
no login
transport input telnet ssh
for switch
!
!

```
no service password-encryption
!
hostname switch1
enable password cisco
username ciscouser password 0 cisco
ip domain-name cisco.com
banner login ^c
********** welcome to router1 If you encountered any problem, please consult the administrator ********** ^c
line con 0
line vty 0 4
login login local
transport input ssh
line vty 5 15
login local
transport input ssh
```

A is correct as we can telnet from line 0 to line 4 (line vty o 4).
We can use both telnet and SSH to connect to this router (transport input telnet ssh) -> B is not correct.
C is correct as we can telnet to it.
D is not correct because by default, the timeout is set to 10 minutes on both the console and the vty ports.
E is not correct as NAT can be used even DHCP is not used.

QUESTION 23
A workstation has just resolved a browser URL to the IP address of a server. Which protocol will the workstation now use to determine the destination MAC address to be placed into frames directed toward the sever?

A. ARP
B. RARP
C. DNS
D. DHCP
E. HTTP

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 24
What is the default lease time for a DHCP binding?

A. 24 hours
B. 12 hours
C. 48 hours
D. 36 hours

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 25
When a router makes a routing decision for a packet that is received from one network and destined to another, which portion of the packet does it replace?

A. Layer 2 frame header and trailer
B. Layer 3 IP address
C. Layer 5 session
D. Layer 4 protocol

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:
What does a router do with a packet received from one network and destined for another network? The router performs the following three major steps:
- **Step 1.** De-encapsulates the Layer 3 packet by removing the Layer 2 frame header and trailer.
- **Step 2.** Examines the destination IP address of the IP packet to find the best path in the routing table.
- **Step 3.** If the router finds a path to the destination, it encapsulates the Layer 3 packet into a new Layer 2 frame and forwards the frame out the exit interface.

Reference: http://www.ciscopress.com/articles/article.asp?p=2180208&seqNum=8

QUESTION 26
Which device allows users to connect to the network using a single or double radio?

A. access point
B. switch
C. wireless controller

D. firewall

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

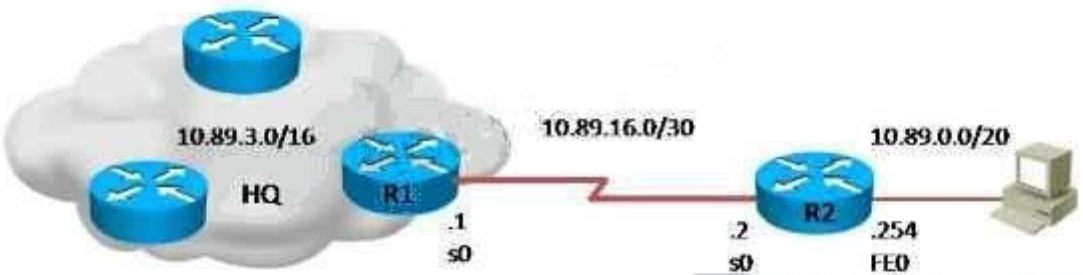
QUESTION 27
Which entity assigns IPv6 addresses to end users?

A. ICANN
B. APNIC
C. RIR
D. ISPs

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 28
Refer to the exhibit.



Which command is simplest to configure routing between the regional office network 10.89.0.0/20 and the corporate network?

A. router2(config)#ip route 0.0.0.0 0.0.0.0 10.89.16.1
B. router2(config)#ip route 10.89.3.0 255.255.0.0 10.89.16.2
C. router1(config)#ip route 10.89.0.0 255.255.240.0 10.89.16.1
D. router1(config)#ip route 10.89.0.0 255.255.240.0 10.89.16.2

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

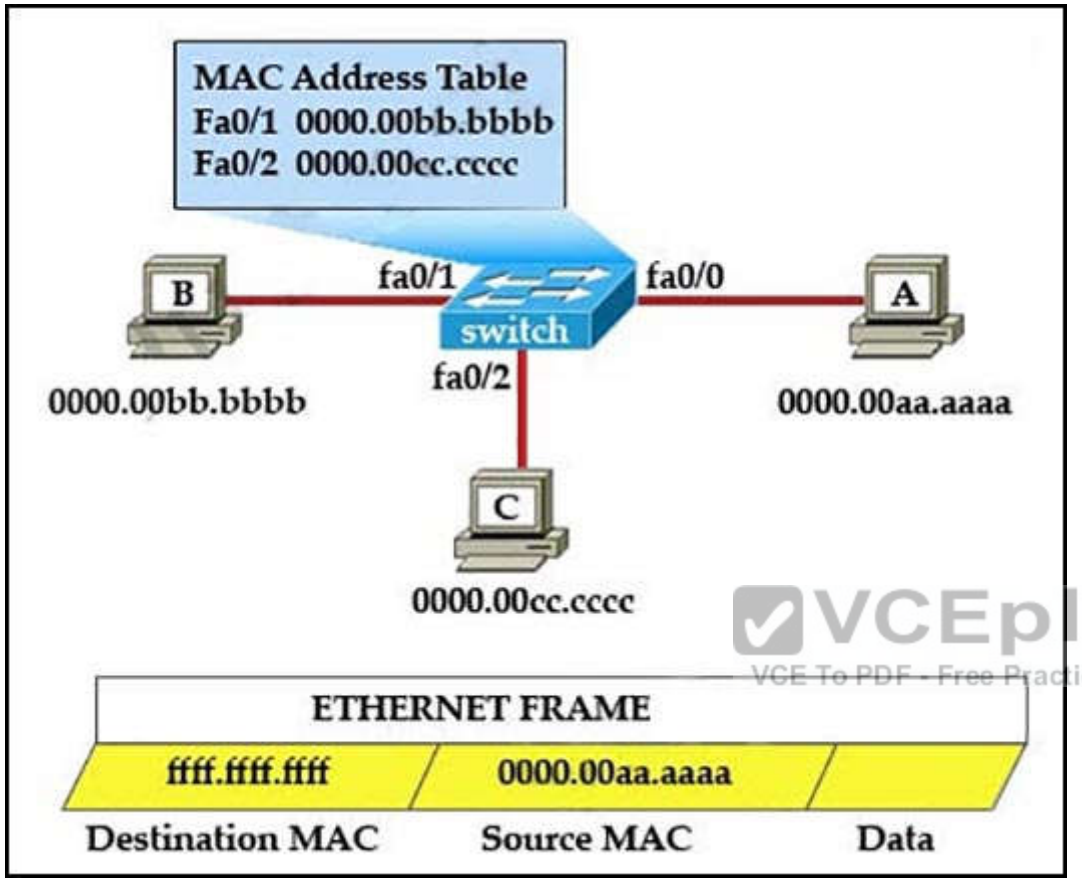
QUESTION 29
What is one requirement for interfaces to run IPv6?

A. An IPv6 address must be configured on the interface.
B. An IPv4 address must be configured.
C. Stateless autoconfiguration must be enabled after enabling IPv6 on the interface
D. IPv6 must be enabled with the **ipv6 enable** command in global configuration mode.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 30
Refer to the exhibit.



The MAC address table is shown in its entirety. The Ethernet frame that is shown arrives at the switch. What two operations will the switch perform when it receives this frame? (Choose two.)

A. The switch will not forward a frame with this destination MAC address.
B. The frame will be forwarded out of all the ports on the switch.
C. The MAC address of ffff.ffff.ffff will be added to the MAC address table.
D. The frame will be forwarded out of all the active switch ports except for port fa0/0.
E. The MAC address of 0000.00aa.aaaa will be added to the MAC Address Table.
F. The frame will be forwarded out of fa0/0 and fa0/1 only.

Correct Answer: DE
Section: (none)
Explanation

Explanation/Reference:
Explanation:
If the switch already has the MAC address in its table for the destination, it will forward the frame directly to the destination port. If it was not already in its MAC table, then the source MAC is added to the MAC address table and frame would have been flooded out all ports except for the port that it came from.

QUESTION 31
Which network topology allows all traffic to flow through a central hub?

A. bus
B. star
C. mesh
D. ring

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Star topology is the arrangement of the computers in such a way that all the terminals or work stations are connected to the main central hub. The terminals are referred to as the clients and the main central hub is referred to as the switch. It is the easiest way of arranging a network topology with one central main computer connected to several other functioning terminals. All the network traffic passes through the central device and all the data transmission occurs through the main switch as well as all the hub acts as the signal repeater. One advantage of such an arrangement is the simplicity and the ease with which you can add additional nodes. The disadvantage is that if an error occurs in the central hub the whole network shuts down.

Reference: http://www.certiology.com/computing/computer-networking/network-topology.html

QUESTION 32
Which two statements are true regarding ICMP packets? (Choose two.)

A. They are encapsulated within IP datagrams.
B. They guarantee datagram delivery.
C. TRACERT uses ICMP packets.
D. They acknowledge receipt of TCP segments.
E. They are encapsulated within UDP datagrams.

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:

QUESTION 33
Which method does a connected trunk port use to tag VLAN traffic?

A. IEEE 802.1w
B. IEEE 802.1D
C. IEEE 802.1Q
D. IEEE 802.1p

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 34
On which type of device is every port in the same collision domain?

A. a router
B. a Layer 2 switch
C. switch
D. a hub
E. a Layer 3 switch

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:
The definition of a collision domain is a set of LAN devices whose frames could collide with one another. This happens with hubs, bridges, repeaters and wireless access points as only one device can send and receive. If more than one device tries sending or receiving, the information is lost and irrecoverable it will need to be resent. This can slow down network performance along with making it a security threat.

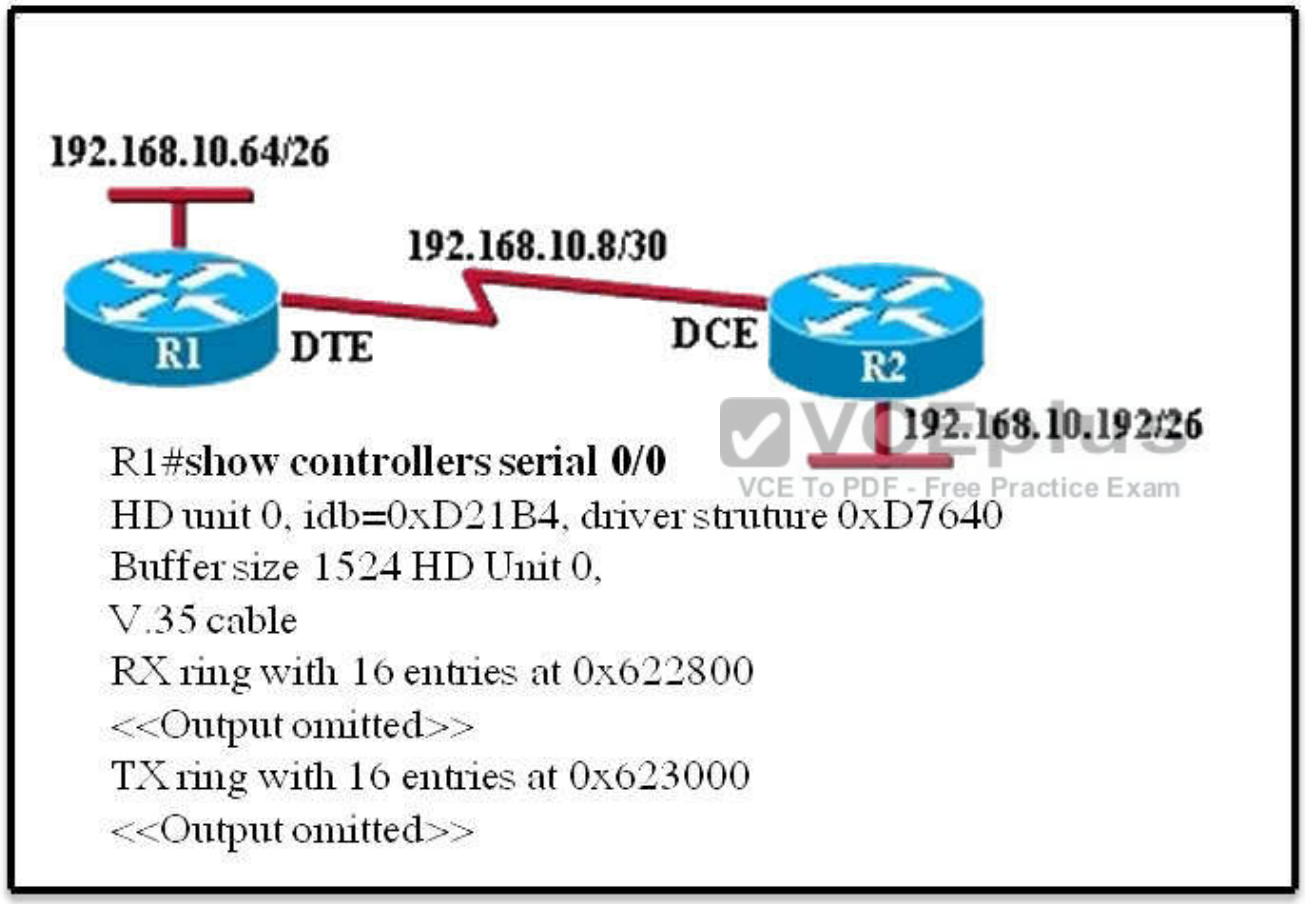
QUESTION 35
Which option is the default switch port port-security violation mode?

A. shutdown
B. protect
C. shutdown vlan
D. restrict

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 36
Refer to the exhibit.



An administrator cannot connect from R1 to R2. To troubleshoot this problem, the administrator has entered the command shown in the exhibit. Based on the output shown, what could be the problem?

A. The serial interface is configured for the wrong frame size.

B. The serial interface does not have a cable attached.
C. The serial interface has the wrong type of cable attached.
D. The serial interface has a full buffer.
E. The serial interface is configured for half duplex.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 37
Which statement about native VLAN traffic is true?

A. Cisco Discovery Protocol traffic travels on the native VLAN by default.
B. Traffic on the native VLAN is tagged with 1 by default.
C. Control plane traffic is blocked on the native VLAN.
D. The native VLAN is typically disabled for security reasons.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 38
Which value is indicated by the next hop in a routing table?

A. preference of the route source
B. IP address of the remote router for forwarding the packets
C. how the route was learned
D. exit interface IP address for forwarding the packets

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 39
Which component of the routing table ranks routing protocols according to their preferences?

A. administrative distance
B. next hop
C. metric
D. routing protocol code

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 40
At which layer of the OSI model does the protocol that provides the information that is displayed by the **show cdp neighbors** command operate?

A. data link
B. application
C. network
D. transport
E. physical

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 41
Which statement about unicast frame forwarding on a switch is true?

A. The TCAM table stores destination MAC addresses.

B. If the destination MAC address is unknown, the frame is flooded to every port that is configured in the same VLAN except on the port that it was received on.
C. The CAM table is used to determine whether traffic is permitted or denied on a switch.
D. The source address is used to determine the switch port to which a frame is forwarded.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 42
By default, how many MAC addresses are permitted to be learned on a switch port with port-security enabled?

A. 8
B. 2
C. 1
D. 0

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Reference: http://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst6500/ios/12-2SX/configuration/guide/book/port_sec.pdf

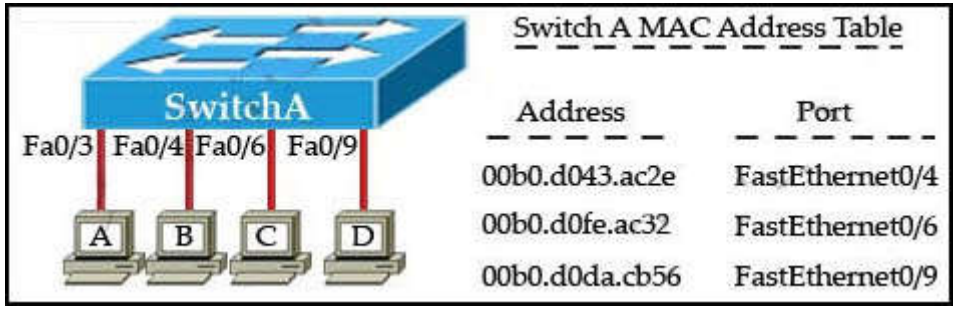
QUESTION 43
Which dynamic routing protocol uses only the hop count to determine the best path to a destination?

A. IGRP
B. RIP
C. EIGRP
D. OSPF

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 44
Refer to the exhibit.



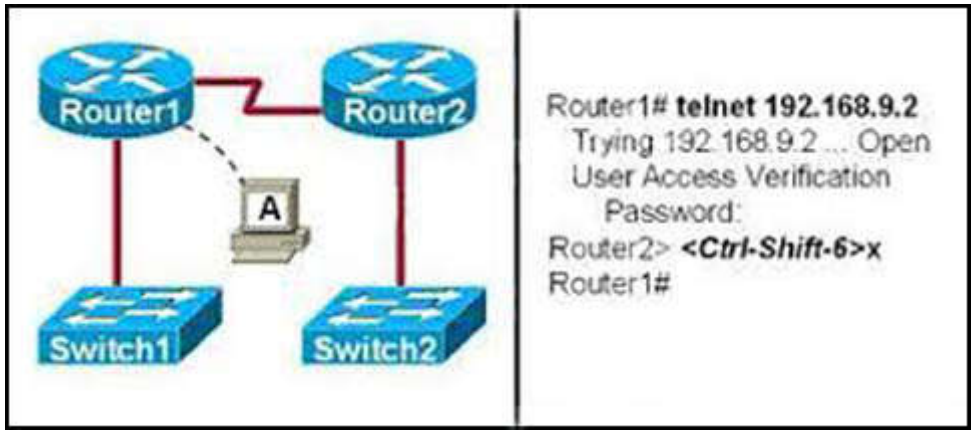
The exhibit is showing the topology and the MAC address table. Host A sends a data frame to host D. Which option describes what the switch will do when it receives the frame from host A?

A. The switch will flood the frame out of all ports except for port Fa0/3.
B. The switch will add the destination address of the frame to the MAC address table and forward the frame to host D.
C. The switch will add the source address and port to the MAC address table and forward the frame to host D.
D. The switch will discard the frame and send an error message back to host A.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 45
Refer to the exhibit.



If the **resume** command is entered after the sequence that is shown in the exhibit, which router prompt will be displayed?

A. Router2#
B. Router2>
C. Router1#
D. Router1>

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 46
Which feature allows a device to use a switch port that is configured for half-duplex to access the network?

A. CSMA/CD
B. IGMP
C. port security
D. split horizon

Correct Answer: A
Section: (none)

Explanation

Explanation/Reference:

QUESTION 47
Which component of a routing table entry represents the subnet mask?

A. routing protocol code
B. prefix
C. metric
D. network mask

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 48
Which technology supports the stateless assignment of IPv6 addresses?

A. DNS
B. DHCPv6
C. DHCP
D. autoconfiguration

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 49
When enabled, which feature prevents routing protocols from sending hello messages on an interface?

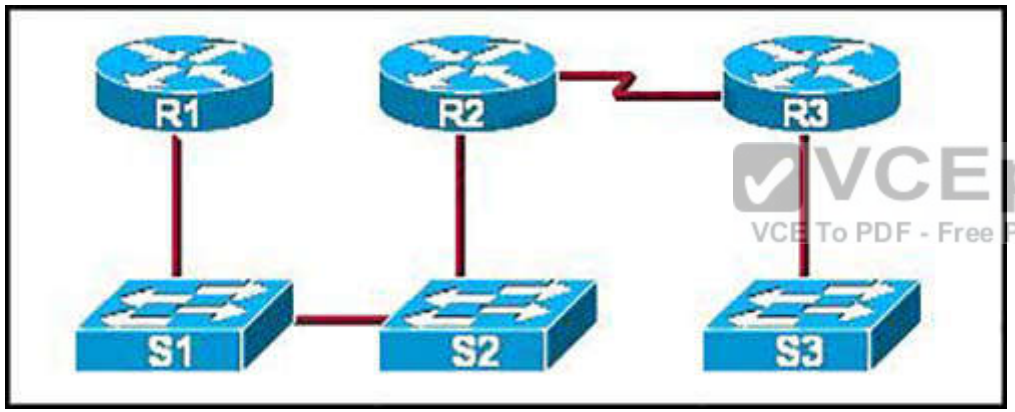
A. virtual links

B. passive-interface
C. directed neighbors
D. OSPF areas

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 50
Refer to the exhibit.



If CDP is enabled on all devices and interfaces, which devices will appear in the output of a **show cdp neighbors** command issued from R2?

A. R1, S1, S2, R3 and S3
B. R2 and R3
C. R3 and S2
D. R1 and R3
E. R1, S1, S2, and R3

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 51
Configuration of which option is required on a Cisco switch for the Cisco IP phone to work?

A. PortFast on the interface
B. the interface as an access port to allow the voice VLAN ID
C. a voice VLAN ID in interface and global configuration mode
D. Cisco Discovery Protocol in global configuration mode

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 52
Which two of these functions do routers perform on packets? (Choose two.)

A. update the Layer 3 headers of outbound packets so that the packets are properly directed to valid next hops
B. update the Layer 2 headers of outbound packets with the MAC addresses of the next hops
C. examine the Layer 3 headers of inbound packets and use that information to determine the complete paths along which the packets will be routed to their ultimate destinations
D. examine the Layer 3 headers of inbound packets and use that information to determine the next hops for the packets
E. examine the Layer 2 headers of inbound packets and use that information to determine the next hops for the packets
F. update the Layer 3 headers of outbound packets so that the packets are properly directed to their ultimate destinations

Correct Answer: BD
Section: (none)
Explanation

Explanation/Reference:

QUESTION 53
Which statement about the inside interface configuration in a NAT deployment is true?

A. It is defined globally.
B. It identifies the location of source addresses for outgoing packets to be translated using access lists or route maps.
C. It must be configured if static NAT is used.
D. It identifies the public IP address that traffic will use to reach the Internet.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 54
You have configured the host computers on a campus LAN to receive their DHCP addresses from the local router to be able to browse their corporate site. Which statement about the network environment is true?

A. It supports a DNS server for use by DHCP clients.
B. Two host computers may be assigned the same IP address.
C. The DNS server must be configured manually on each host.
D. The domain name must be configured locally on each host computer.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 55
The command **ip route 192.168.100.160 255.255.255.224 192.168.10.2** was issued on a router. No routing protocols or other static routes are configured on the router. Which statement is true about this command?

A. The interface with IP address 192.168.10.2 is on this router.
B. The command sets a gateway of last resort for the router.
C. Packets that are destined for host 192.168.100.160 will be sent to 192.168.10.2.
D. The command creates a static route for all IP traffic with the source address 192.168.100.160.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 56
Which three statements are true about the operation of a full-duplex Ethernet network? (Choose three.)

A. The host network card and the switch port must be capable of operating in full-duplex mode.
B. Ethernet hub ports are preconfigured for full-duplex mode.
C. A dedicated switch port is required for each full-duplex node.
D. There are no collisions in full-duplex mode.
E. In a full-duplex environment, the host network card must check for the availability of the network media before transmitting.

Correct Answer: ACD
Section: (none)
Explanation

Explanation/Reference:

QUESTION 57
Which Ethernet interface command is present when you boot a new Cisco router for the first time?

A. speed 100
B. shutdown
C. ip address 192.168.1.1 255.255.255.0
D. duplex half

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 58

After you configure a default route to the Internet on a router, the route is missing from the routing table. Which option describes a possible reason for the problem?

A. The next-hop address is unreachable.
B. The default route was configured on a passive interface.
C. Dynamic routing is disabled.
D. Cisco Discovery Protocol is disabled on the interface used to reach the next hop.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 59
Which table displays the MAC addresses that are learned on a switch?

A. FIB
B. ARP
C. TCAM
D. CAM

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 60
Why would a network administrator configure port security on a switch?

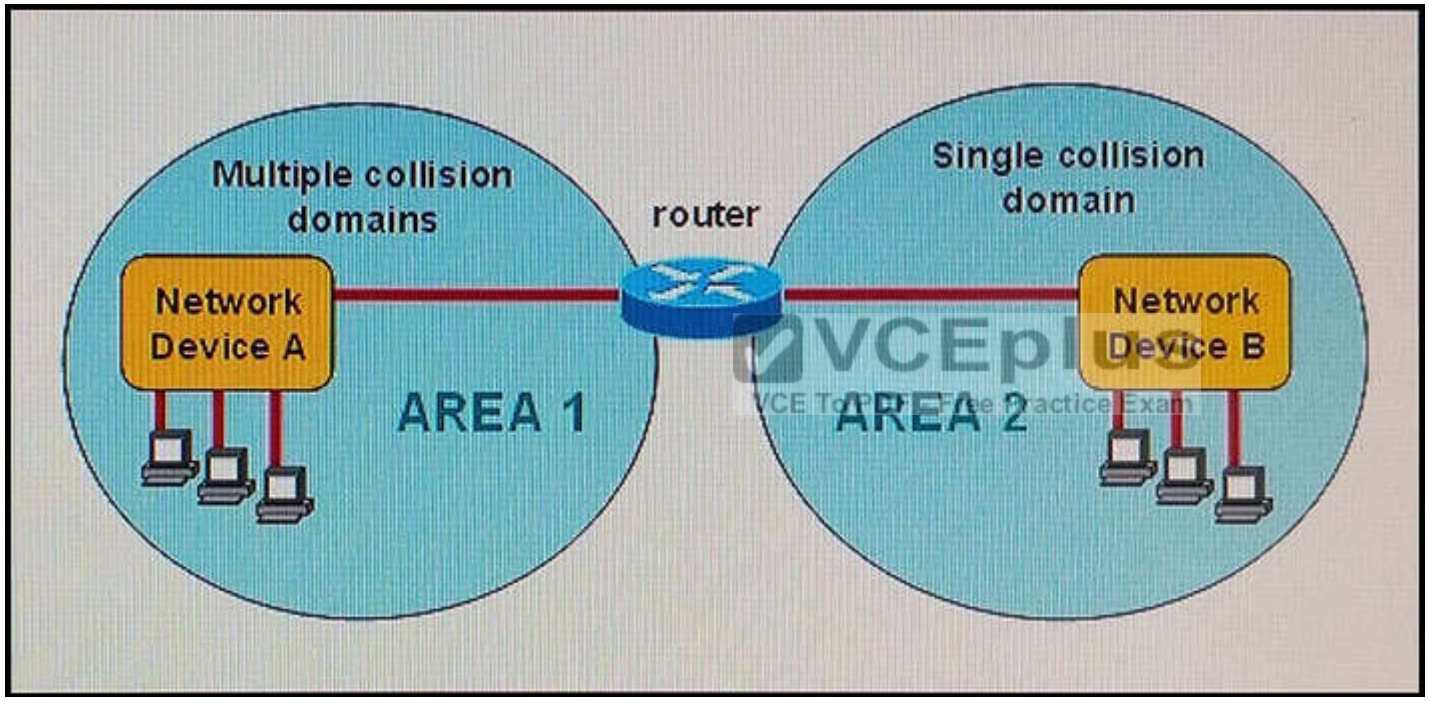
A. to limit the number of Layer 2 broadcasts on a particular switch port
B. to prevent unauthorized Telnet access to a switch port
C. to prevent unauthorized hosts from accessing the LAN
D. block unauthorized access to the switch management interfaces

Correct Answer: C

Section: (none)
Explanation

Explanation/Reference:

QUESTION 61
Refer to the exhibit.



A network has been planned as shown. Which three statements accurately describe the areas and devices in the network plan? (Choose three.)

A. Area 2 contains a Layer 2 device.
B. Network Device B is a hub.
C. Network Device A is a hub.
D. Network Device A is a switch.
E. Area 1 contains a Layer 2 device.

F. Network Device B is a switch.

Correct Answer: BDE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 62
Which two things does a router do when it forwards a packet? (Choose two.)

A. determines the next hop on the path
B. switches the packet to the appropriate outgoing interfaces
C. computes the destination host address
D. forwards ARP requests
E. updates the destination IP address

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:

QUESTION 63
Which two statements describe the operation of the CSMA/CD access method? (Choose two.)

A. After a collision, all stations run a random backoff algorithm. When the backoff delay period has expired, all stations have equal priority to transmit data.
B. In a CSMA/CD collision domain, multiple stations can successfully transmit data simultaneously.
C. After a collision, the station that detected the collision has first priority to resend the lost data.
D. The use of hubs to enlarge the size of collision domain is one way to improve the operation of the CSMA/CD access method.
E. After a collision, all stations involved run an identical backoff algorithm and then synchronize with each other prior to transmitting data.
F. In a CSMA/CD collision domain, stations must wait until media is not in use before transmitting.

Correct Answer: AF
Section: (none)
Explanation

Explanation/Reference:

QUESTION 64
Which set of conditions comprises a successful ping attempt between two connected routers configured with IP addresses on the same subnet?

A. The destination host receives an echo reply from the source host within one second and the source host receives an echo request from the destination host.
B. The destination host receives an echo request from the source host within one second.
C. The destination host receives an echo reply from the source host within one second and the source host receives an echo reply from the destination host within two seconds.
D. The destination host receives an echo request from the source host and the source host receives an echo request from the destination host within one second.
E. The destination host receives an echo request from the source host and the source host receives an echo reply from the destination host within two seconds.

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:

QUESTION 65
Which NTP concept indicates the distance between a device and the reliable time source?

A. clock offset
B. stratum
C. reference
D. dispersion

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 66
Which statement is a Cisco best practice for switch port security?

A. Vacant switch ports must be shut down.
B. Empty ports must be enabled in VLAN 1.
C. VLAN 1 must be configured as the native VLAN.
D. Err-disabled ports must be configured to automatically re-enable.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 67
Which statement about unique local IPv6 addresses is true?

A. Summarization is not supported.
B. They require all prefixes to be unique.
C. Their global IDs are assigned sequentially.
D. They are routable to the public Internet.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 68
Which three statements accurately describe CDP? (Choose three.)

A. CDP can discover Cisco devices that are not directly connected.
B. CDP is a network layer protocol.
C. CDP can discover directly connected neighboring Cisco devices.
D. CDP is a datalink layer protocol.
E. CDP is a Cisco proprietary protocol.
F. CDP is an IEEE standard protocol.

Correct Answer: CDE

Section: (none)
Explanation

Explanation/Reference:

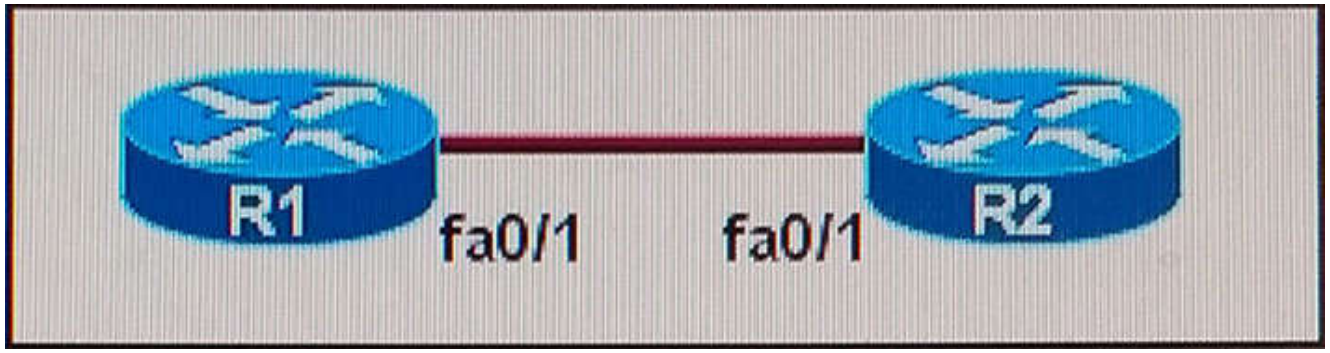
QUESTION 69
Which statement describes the effect of the **overload** keyword in the **ip nat inside source list 90 interface ethernet 0/0 overload** command?

A. Addresses that match access list **inside** are translated to the IP address of the Ethernet 0/0 interface.
B. Hosts that match access list **inside** are translated to an address in the Ethernet 0/0 network.
C. Hosts on the Ethernet 0/0 LAN are translated to the address pool in access list **90**.
D. Addresses that match access list **90** are translated through PAT to the IP address of the Ethernet 0/0 interface.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 70
Refer to the exhibit.



The two routers have had their startup configurations cleared and have been restarted. At a minimum, which option below must the administrator do to enable CDP to exchange information between R1 and R2?

A. Configure the router with the **cdp enable** command.
B. Configure IP addressing and **no shutdown** commands on both the R1 and R2 fa0/1 interfaces.
C. Configure IP addressing and **no shutdown** commands on either of the R1 or R2 fa0/1 interfaces.
D. Enter **no shutdown** commands on the R1 and R2 fa0/1 interfaces.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 71
On a live network, which two commands will verify the operational status of router interfaces? (Choose two.)

A. **Router# show ip interface brief**
B. **Router# debug interface**
C. **Router# show ip protocols**
D. **Router# show interfaces**
E. **Router# show start**

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:

QUESTION 72
Which two options will help to solve the problem of a network that is suffering a broadcast storm? (Choose two.)

A. a Layer 3 switch
B. a hub
C. a bridge
D. an access point
E. a router

Correct Answer: AE

Section: (none)
Explanation

Explanation/Reference:

QUESTION 73
Which technique can you use to route IPv6 traffic over an IPv4 infrastructure?

A. NAT
B. 6to4 tunneling
C. L2TPv3
D. dual-stack

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 74
Which NAT command can be applied to an interface?

A. **ip nat inside**
B. **ip nat inside test access-list-number pool pool-name**
C. **ip nat inside source static 10.10.10.0 10.10.10.50**
D. **ip nat pool test 10.10.10.0 10.10.10.50 255.255.255.0**

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 75

Instructions

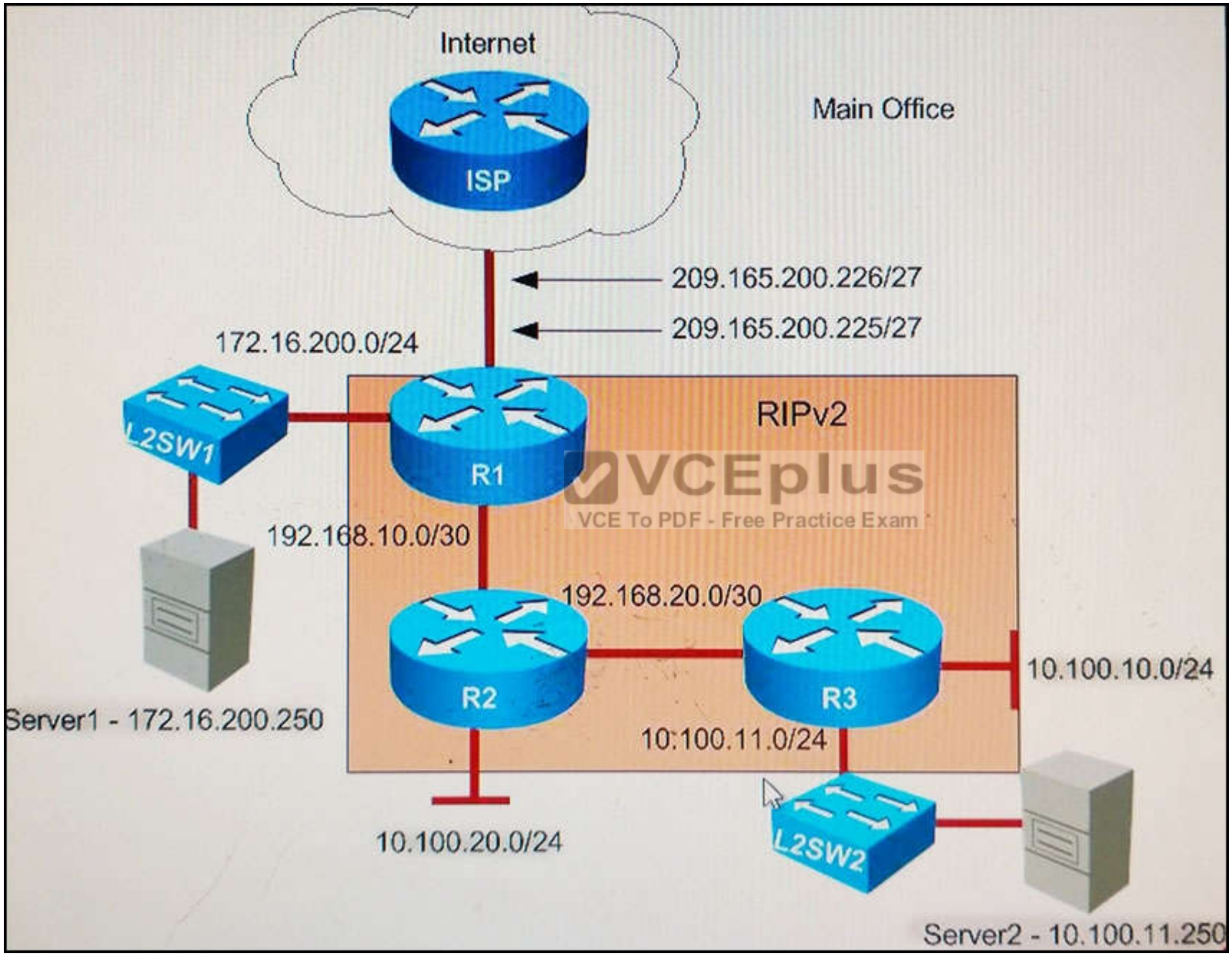
- Enter IOS commands on the device to verify network operation and answer the multiple-choice questions.
- **THIS TASK DOES NOT REQUIRE DEVICE CONFIGURATION.**
- Click the device icon to gain access to the console of the device. No console or enable passwords are required.
- To access the multiple-choice 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 button.

Scenario

You are a junior network engineer for a financial company, and the main office network is experiencing network issues. Troubleshoot the network issues.

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

You have console access on R1, R2, and R3 devices. Use only show commands to troubleshoot the issues.



Examine the DHCP configuration between R2 and R3; R2 is configured as the DHCP server and R3 as the client. What is the reason R3 is not receiving the IP address via DHCP?

A. On R2, the network statement in the DHCP pool configuration is incorrectly configured.
B. On R3, DHCP is not enabled on the interface that is connected to R2.
C. On R2, the interface that is connected to R3 is in shutdown condition.
D. On R3, the interface that is connected to R2 is in shutdown condition.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:
First we should check which interface on R3 that is connected to R2 via the “show run” command.

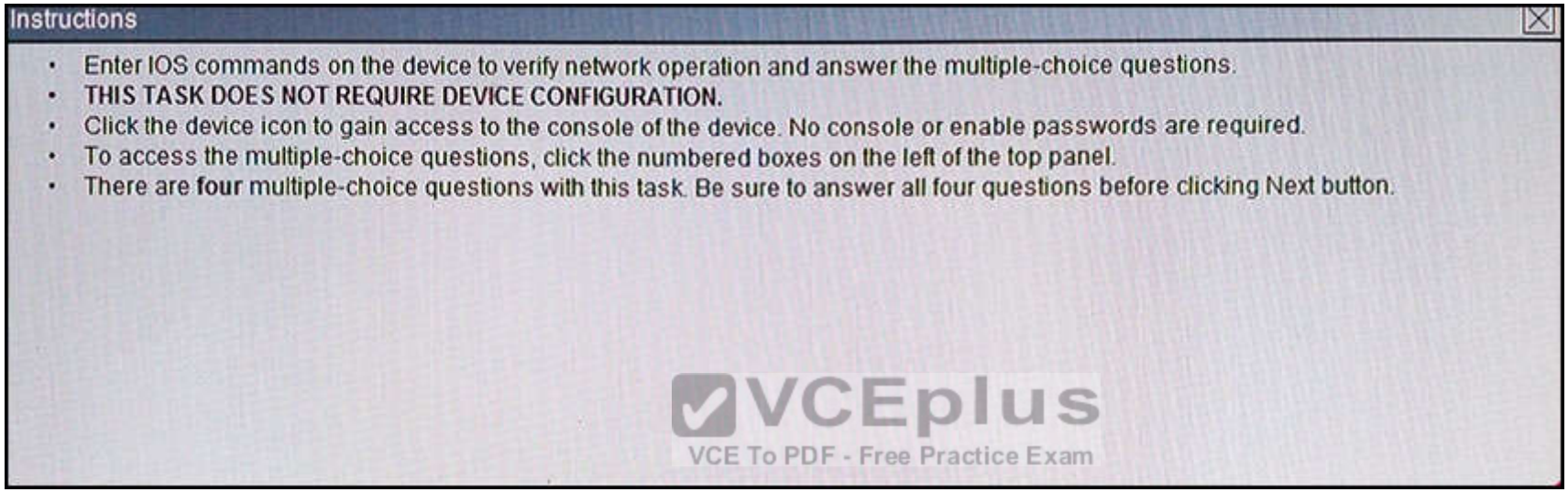
```
R3#show running-config

<output omitted>
interface Ethernet0/1
 description Link to R2
 no ip address
!
```

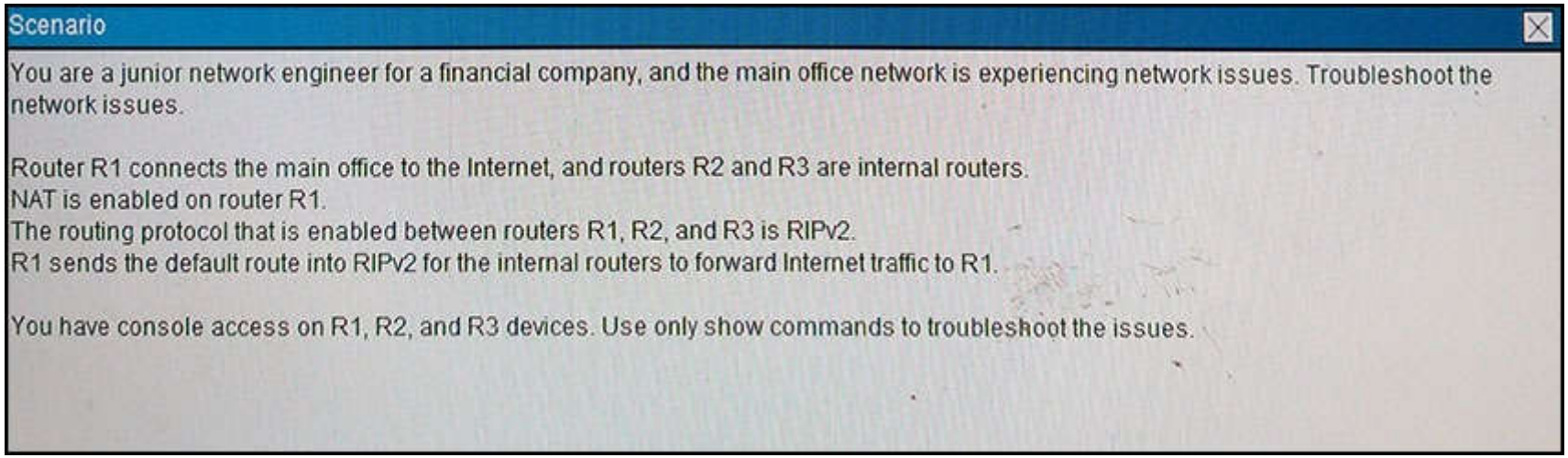

From the description we learn interface E0/1 is connected to R2. Use the “show ip interface brief” command to verify the IP address of this interface.

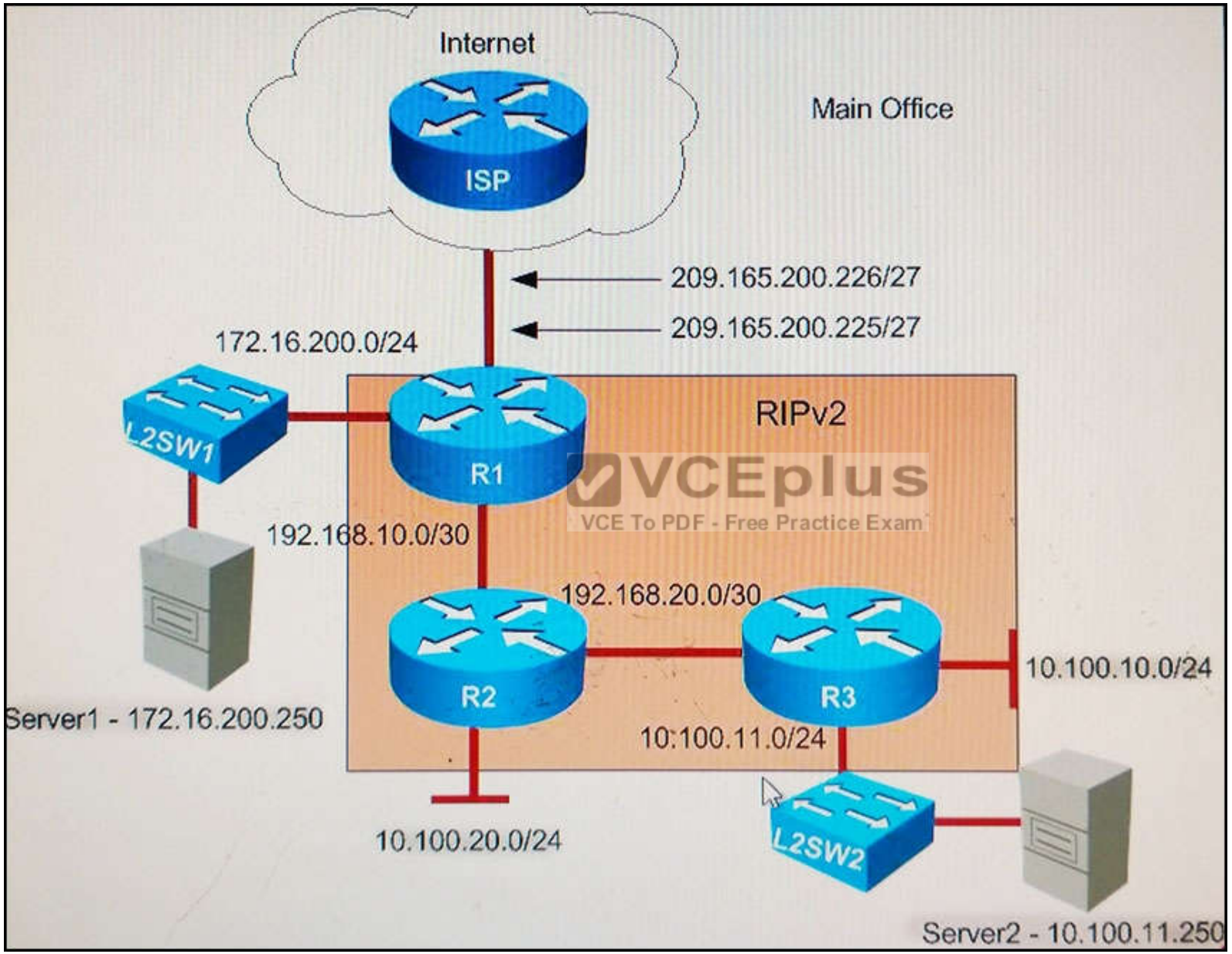
```
R3#show ip interface brief

Interface      IP-Address      OK? Method Status                Protocol
Ethernet0/0    10.100.10.1     YES manual up                    up
Ethernet0/1    unassigned      YES unset  up                    up
Ethernet0/2    10.100.11.1     YES manual up                    up
Ethernet0/3    unassigned      YES unset  administratively down down
Loopback0      192.168.250.3   YES manual up                    up
```

Therefore, we can conclude this interface does not have any IP address and there is no configuration on this interface (except the “description Link to R2” line). If R3 wants to receive an IP address from R2 via DHCP, interface E0/1 should be configured with the command “ip address dhcp” so the answer “DHCP is not enabled on this interface” is correct.

QUESTION 76







R1 router clock is synchronized with ISP router. R2 is supposed to receive NTP updates from R1. But you observe that R2 clock is not synchronized with R1. What is the reason R2 is not receiving NTP updates from R1?

A. The IP address that is used in the NTP configuration on R2 router is incorrect.
B. The NTP server command not configured on R2 router.
C. R2 router Ethernet interface that is connected to R1 is placed in shutdown condition.
D. R1 router Ethernet interface that is connected to R2 is placed in shutdown condition.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:
First we should verify if the ports connected between R1 and R2 is in “up/up” state with the “show ip interface brief” command on R1 & R2.

```
R1#show ip interface brief

Interface      IP-Address      OK? Method Status                Protocol
Ethernet0/0    209.165.200.225 YES manual up                    up
Ethernet0/1    172.16.200.1    YES manual up                    up
Ethernet0/2    192.168.10.1    YES manual up                    up
Ethernet0/3    unassigned      YES unset  administratively down down
Loopback0      192.168.250.1   YES manual up                    up
NVI0           192.168.250.1   YES unset  up                    up

R2#show ip interface brief

Interface      IP-Address      OK? Method Status                Protocol
Ethernet0/0    192.168.20.1    YES manual up                    up
Ethernet0/1    unassigned      YES unset  up                    up
Ethernet0/2    192.168.10.2    YES manual up                    up
Ethernet0/3    10.100.20.1     YES manual up                    up
Loopback0      192.168.250.2   YES manual up                    up
```

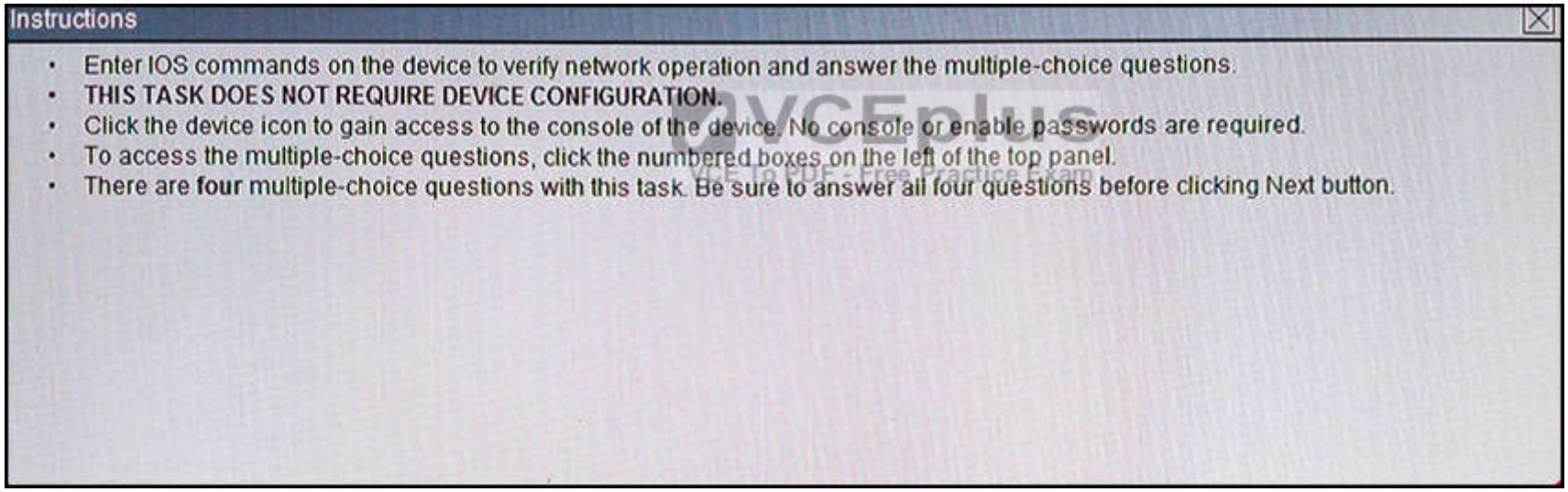
Note: We learn R1 & R2 connect to each other via E0/2 interface because the IP addresses of these interfaces belong to 192.168.10.0/30 subnet. Both of them are

"up/up" so the link connecting between R1 & R2 is good.
Next we need to verify the ntp configuration on R2 with the "show running-config" command:

```
R2#show running-config
<output omitted>
ntp server 192.168.100.1
!
end
```

So there is only one command related to NTP configuration on R2 so we need to check if the IP address of 192.168.100.1 is correct or not. But from the "show ip interface brief" command on R1 we don't see this IP -> This IP address is not correct. It should be 192.168.10.1 (IP address of interface E0/2 of R1), not 192.168.100.1.

QUESTION 77

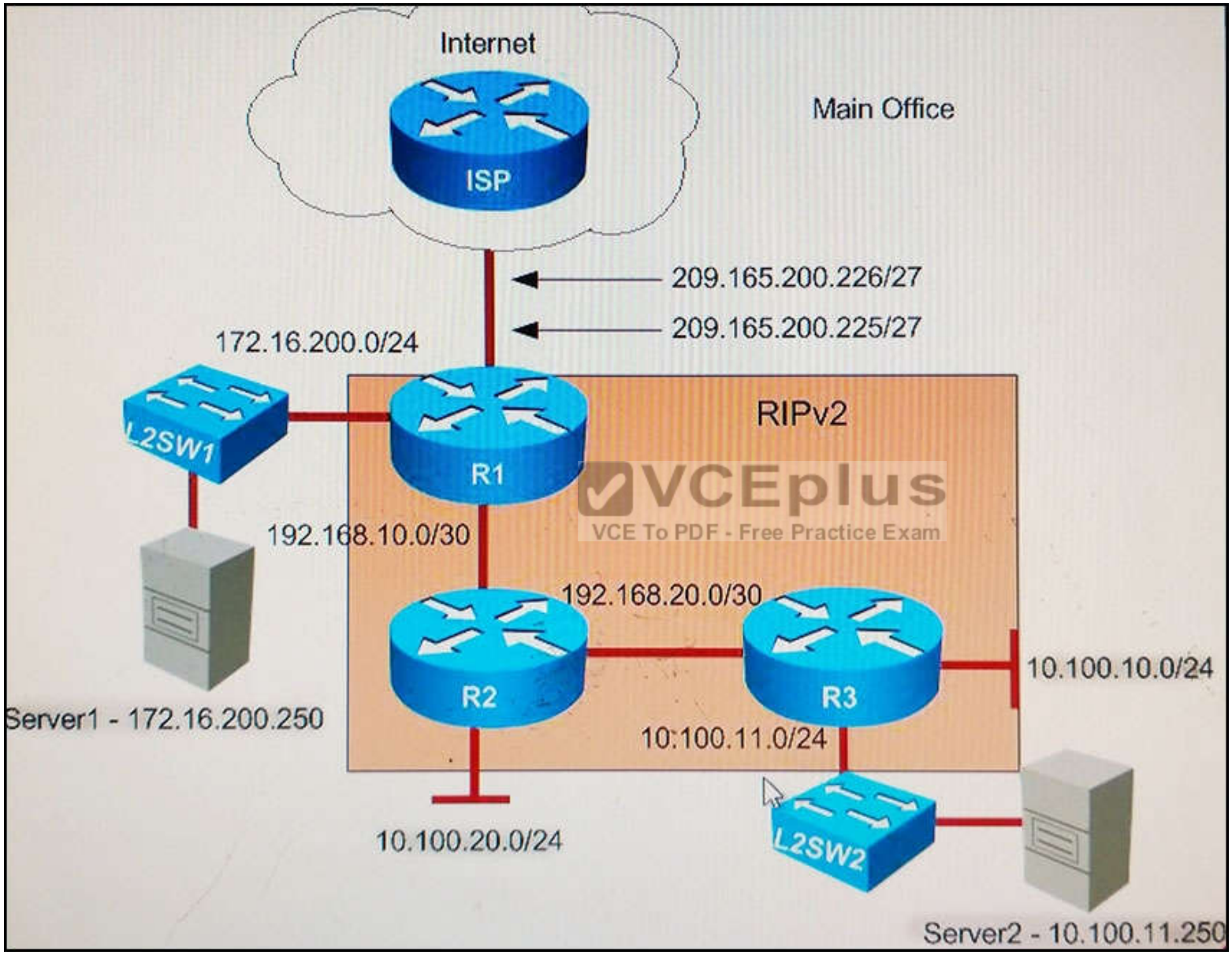


Scenario

You are a junior network engineer for a financial company, and the main office network is experiencing network issues. Troubleshoot the network issues.

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

You have console access on R1, R2, and R3 devices. Use only show commands to troubleshoot the issues.



Why application that are installed on PC's in R2 LAN network 10.100.20.0/24 are unable to communicate with Server1?

A. A standard ACL statement that is configured on R1 is blocking the traffic sourced from Server1 network.
B. A standard ACL statement that is configured on R2 is blocking the traffic sourced from Server1 network.
C. A standard ACL statement that is configured on R2 is blocking the traffic sourced from R2 LAN network.
D. A standard ACL statement that is configured on R1 is blocking the traffic sourced from R2 LAN network.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:
We should check if we can ping from R1 to Server 1 or not:

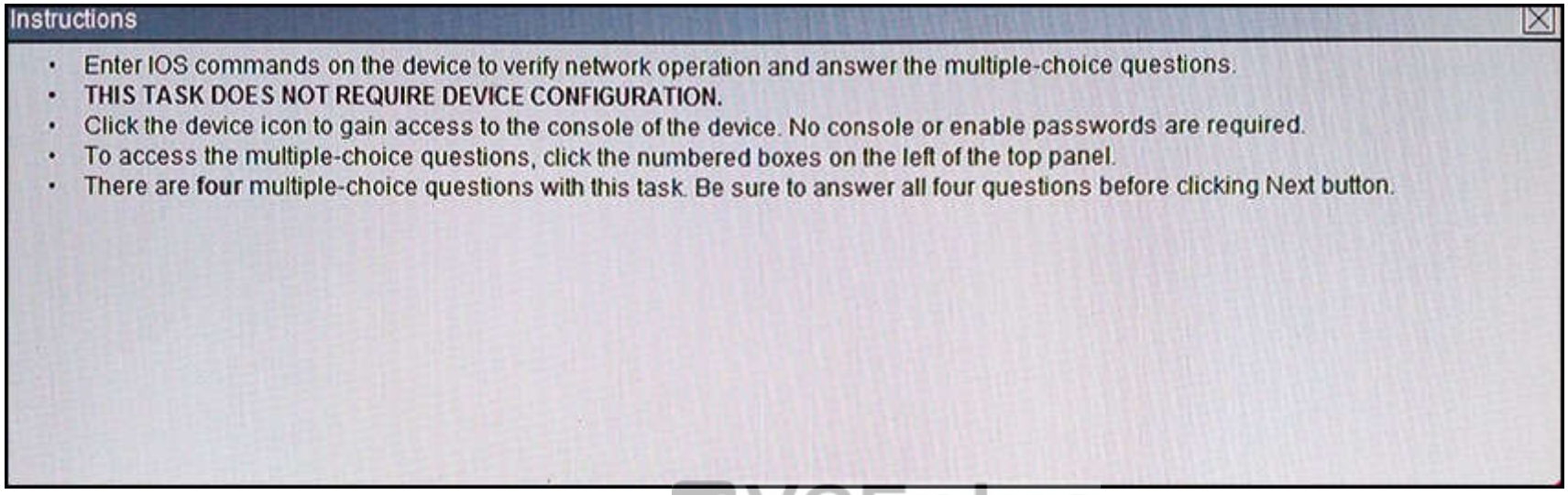
```
R1#ping 172.16.200.250
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.16.200.250, timeout is 2 seconds:
!!!!!
```

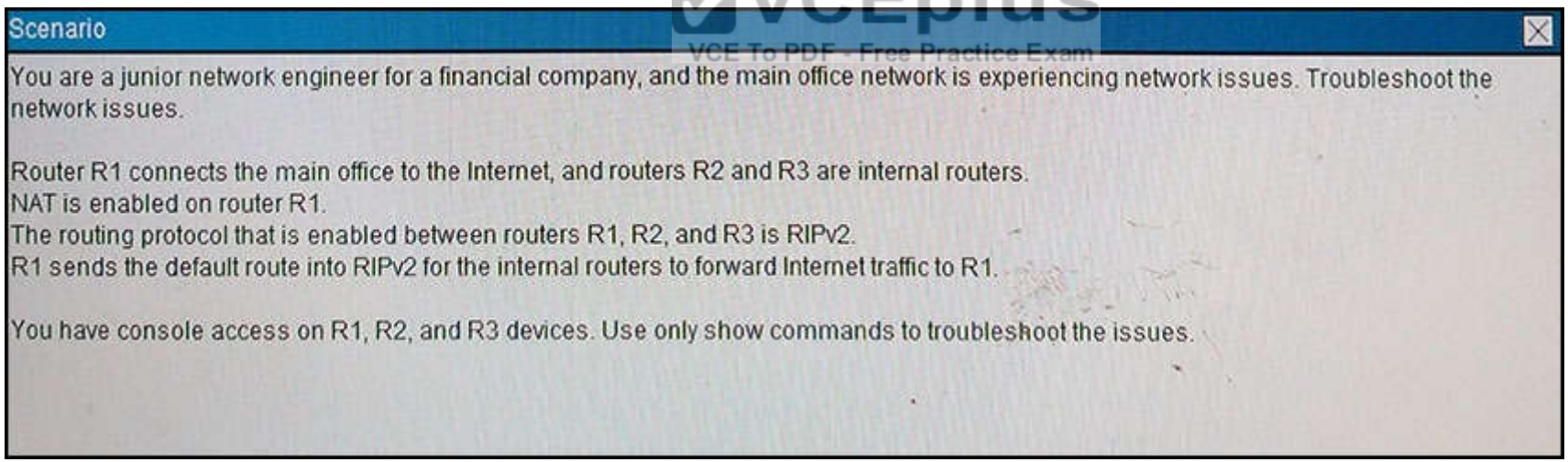

The ping worked well so maybe R1 is good so we should check R2 first. We notice on R2 there is an access-list:

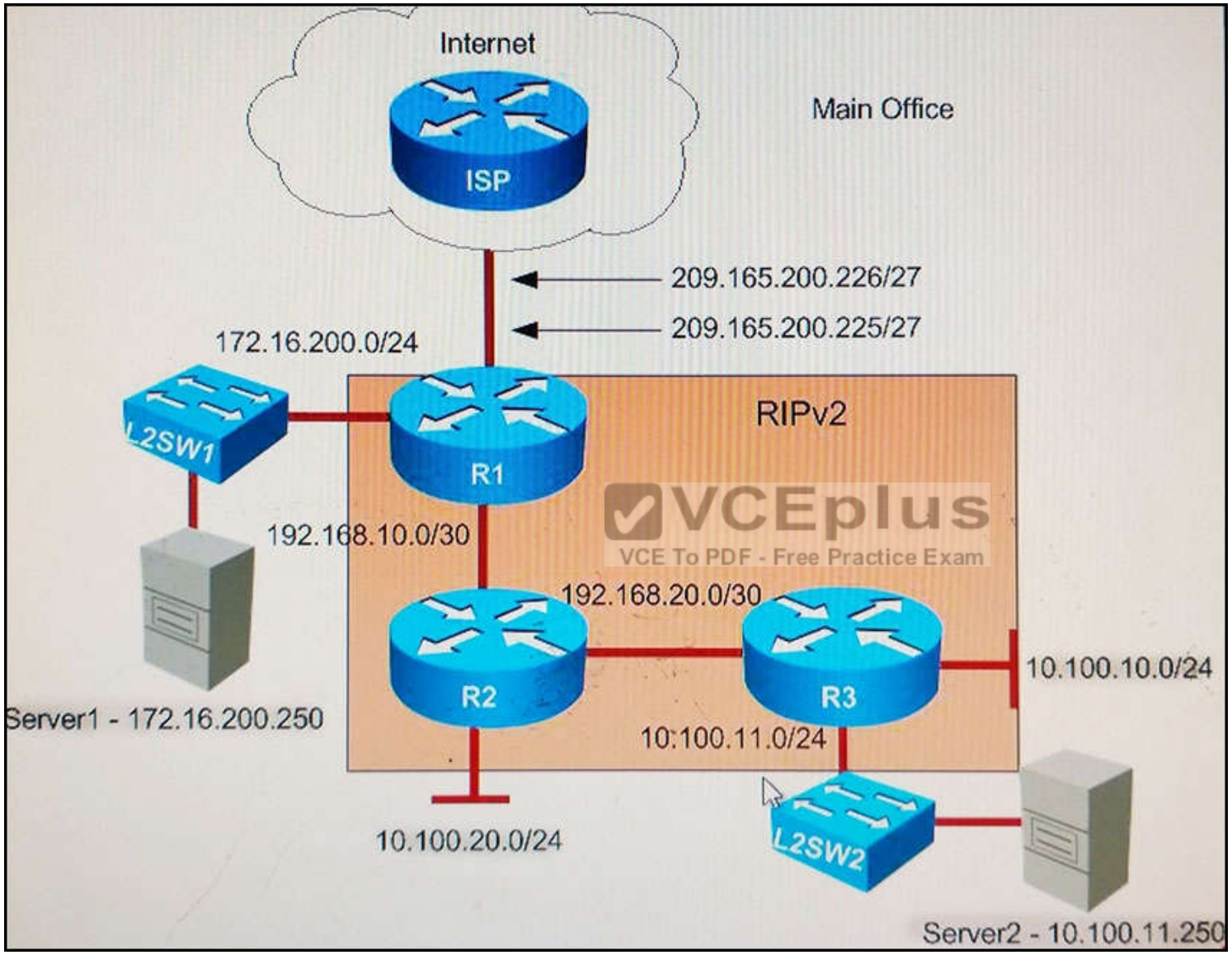
```
R2# show running-config
<output omitted>
interface Ethernet0/2
 description Link to R1
 ip address 192.168.10.2 255.255.255.252
 ip access-group SERVER1BLOCK in
!
<output omitted>
ip access-list standard SERVER1BLOCK
 deny   172.16.200.0 0.0.0.255
 permit any
```

This access-list is applied to E0/2 interface with inbound direction. The purpose of this access-list is to block traffic with source IP address of 172.16.200.0/24 so it will block all traffic sent from Server 1 to us.

QUESTION 78







Users complain that they are unable to reach Internet sites. You are troubleshooting Internet connectivity problem at main office. Which statement correctly identifies the problem on Router R1?

A. Interesting traffic for NAT ACL is incorrectly configured.
B. NAT configurations in the interfaces are incorrectly configured.
C. NAT translation statement incorrectly configured.
D. Only static NAT translation configured for the server, missing Dynamic NAT or Dynamic NAT overloading for internal networks.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:
If all users cannot access the Internet, then R1 is most likely to cause the problem so we should check it first. From the “show running-config” command we will see:

```
R1# show running-config
<output omitted>

interface Ethernet0/0
 description Link to ISP
 ip address 209.165.200.225 255.255.255.224
 ip nat inside
 ip virtual-reassembly in
!
interface Ethernet0/1
 description Link to Server 1
 ip address 172.16.200.1 255.255.255.0
 ip nat outside
 ip virtual-reassembly in
!
interface Ethernet0/2
 description Link to R2
 ip address 192.168.10.1 255.255.255.252
 ip nat outside
 ip virtual-reassembly in
```

Here we see that interface E0/0 (connected to ISP) has been configured as “nat inside” while interfaces E0/1 & E0/2 (connected to our company) have been configured as “nat outside”. This is not correct because “nat inside” should be configured with interfaces connected to our company while “nat outside” should be configured with interfaces connected to the internet. Therefore, we can conclude the NAT configuration on these interfaces is not correct.

QUESTION 79
Which subnet address is for the IP address 172.19.20.23/28?

A. 172.19.20.20
B. 172.19.20.0
C. 172.19.20.32
D. 172.19.20.15
E. 172.19.20.16

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:

QUESTION 80
Which protocol verifies connectivity between two switches that are configured with IP addresses in the same network?

A. ICMP
B. STP
C. VTP
D. HSRP

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 81
Which command displays the number of times that an individual router translated an inside address to an outside address?

A. **show ip protocol**
B. **show ip nat translation**
C. **show counters**
D. **show ip route**
E. **show ip nat statistics**

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 82
On which OSI layer does a VLAN operate?

A. Layer 1
B. Layer 2
C. Layer 3
D. Layer 4

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 83
What is the subnet address of 192.168.1.42 255.255.255.248?

A. 192.168.1.16/28
B. 192.168.1.32/27
C. 192.168.1.40/29
D. 192.168.1.8/29
E. 192.168.1.48/29

Correct Answer: C

Section: (none)
Explanation

Explanation/Reference:

QUESTION 84
Which statement describes the effect of the **copy run start** command on a router in enable mode?

A. The running configuration of the router is saved to NVRAM and used during the boot process.
B. The router reboots and loads the last saved running configuration.
C. A copy of the running configuration of the router is sent by FTP to a designated server.
D. A new running configuration is loaded from flash memory to the router.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 85
Instructions
For both the Router and the Switch the simulated console mode needs to start and remain in enabled mode.

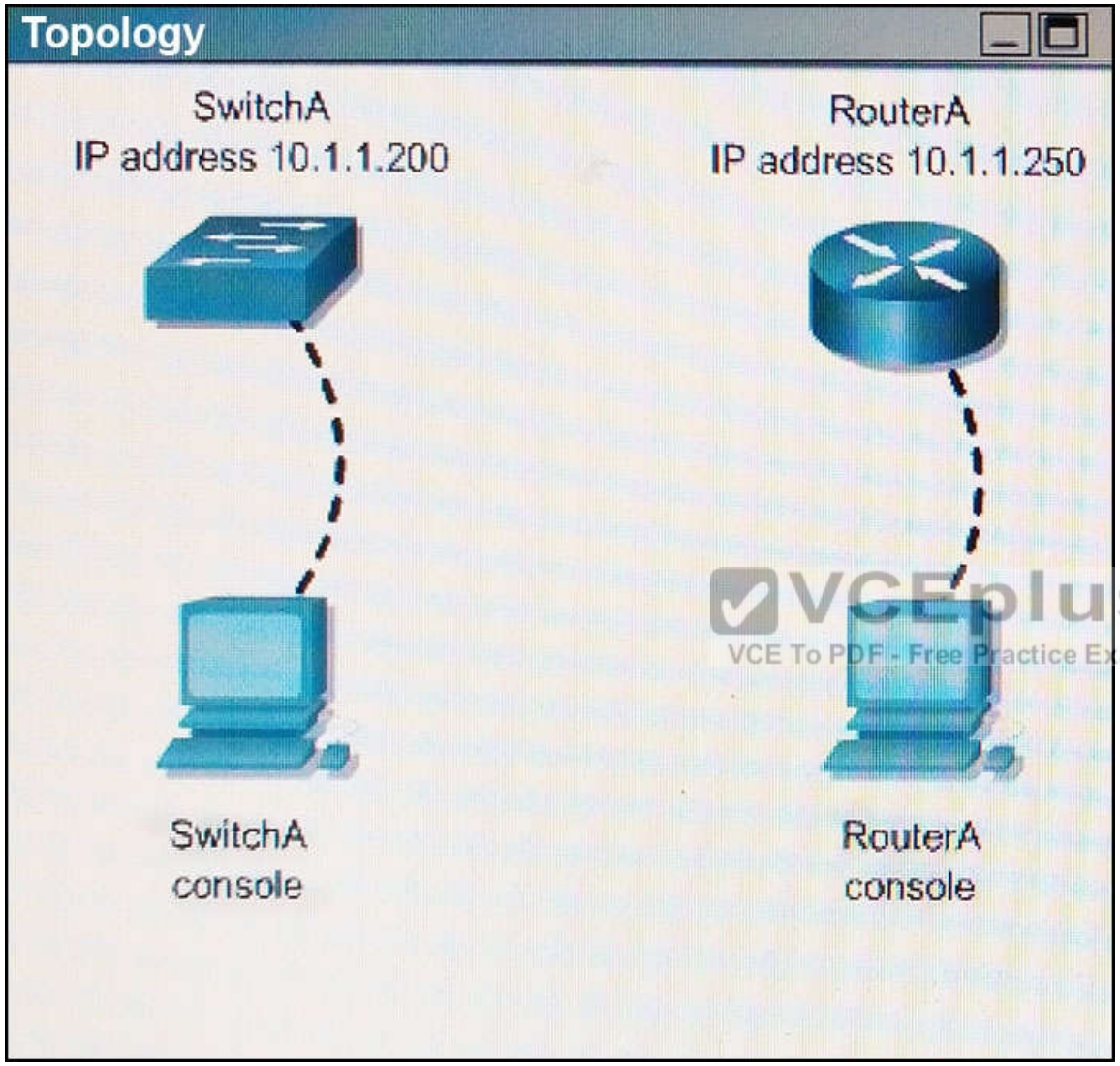
RouterA and SwitchA have been configured to operate in a private network which will connect to the Internet. You have been asked to review the configuration prior to cabling and implementation.

This task requires the use of various IOS commands to access and inspect the running configuration of RouterA and SwitchA. No configuration changes are necessary.

You will connect to RouterA and SwilchA via the console devices that are attached to each.

There are 4 multiple-choice questions with this task. Be sure to answer all of them before leaving this item. In order to score the maximum points you will need to have accessed both SwitchA and RouterA.

NOTE: The configuration command has been disabled for both the router and switch in this simulation.



Which two are security issues which need to be modified before RouterA is used? (Choose two.)

A. unencrypted weak password is configured to protect privilege mode
B. inappropriate wording in banner message

C. the virtual terminal lines have a weak password configured
D. virtual terminal lines have a password, but it will not be used
E. configuration supports un-secure web server access

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:
ROUTER A CONFIGURATION:

!
no service password-encryption
!
enable password cisco
!
username ciscouser privilege 15 password 0 cisco
!
banner motd ^CWelcome! If you encountered any problem, please consult the administrator^C
!
line vty 0 4
password 4t&34rkf
login local
transport input telnet ssh
!

“no service password-encryption” displays the passwords in plain text, and here we see that the password is set to the easily guessable password of “cisco”. Never say “Welcome” in your banner message, it is basically an open invitation to access the device without permission.

QUESTION 86

Instructions
For both the Router and the Switch the simulated console mode needs to start and remain in enabled mode.

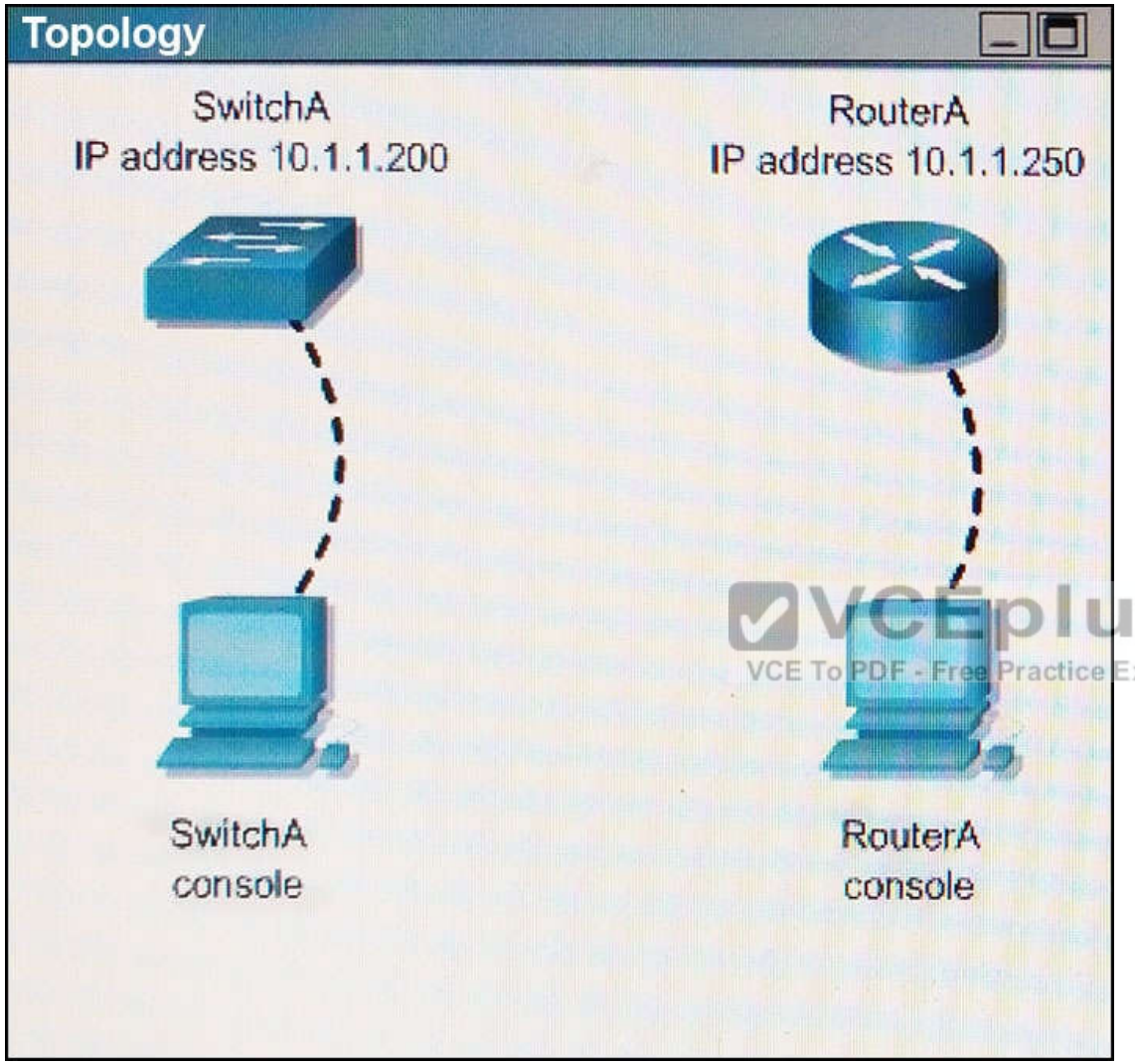
RouterA and SwitchA have been configured to operate in a private network which will connect to the Internet. You have been asked to review the configuration prior to cabling and implementation.

This task requires the use of various IOS commands to access and inspect the running configuration of RouterA and SwitchA. No configuration changes are necessary.

You will connect to RouterA and SwilchA via the console devices that are attached to each.

There are 4 multiple-choice questions with this task. Be sure to answer all of them before leaving this item. In order to score the maximum points you will need to have accessed both SwitchA and RouterA.

NOTE: The configuration command has been disabled for both the router and switch in this simulation.



Which three options are security issues with the current configuration of SwitchA? (Choose three.)

A. privilege mode is protected with an unencrypted password
B. inappropriate wording in banner message

C. virtual terminal lines are protected only by a password requirement
D. both username and password are weak
E. telnet connections can be used to remotely manage the switch
F. ciscouser will be granted privilege level 15 by default

Correct Answer: ABD
Section: (none)
Explanation

Explanation/Reference:
Explanation:
SWITCH A CONFIGURATION

!
!
no service password-encryption
!
hostname switch1
enable password cisco
username ciscouser password 0 cisco
ip domain-name cisco.com

banner login ^c
********** welcome to Switch1. If you encountered any problem, please consult the administrator ********** ^c

line con 0
line vty 0 4
login local
transport input ssh
line vty 5 15
login local
transport input ssh

QUESTION 87

Instructions
For both the Router and the Switch the simulated console mode needs to start and remain in enabled mode.

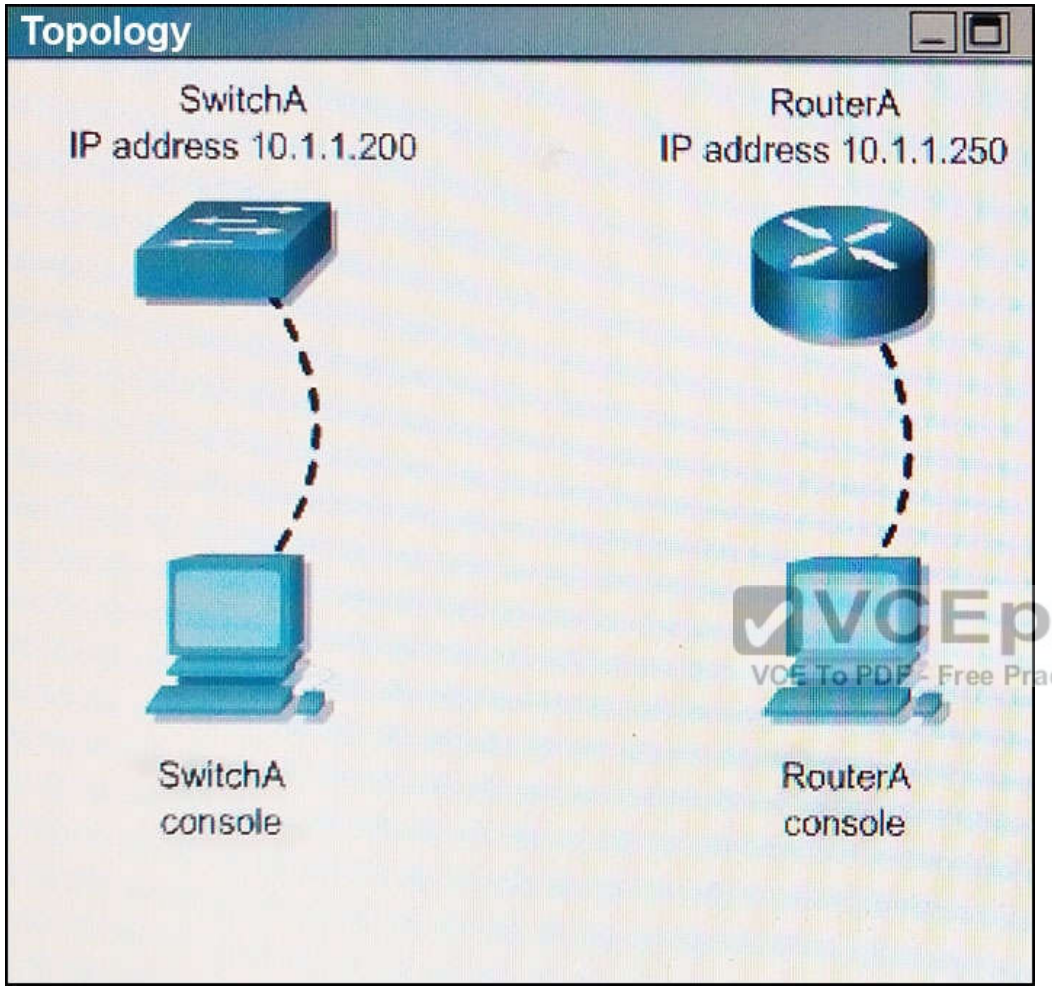
RouterA and SwitchA have been configured to operate in a private network which will connect to the Internet. You have been asked to review the configuration prior to cabling and implementation.

This task requires the use of various IOS commands to access and inspect the running configuration of RouterA and SwitchA. No configuration changes are necessary.

You will connect to RouterA and SwilchA via the console devices that are attached to each.

There are 4 multiple-choice questions with this task. Be sure to answer all of them before leaving this item. In order to score the maximum points you will need to have accessed both SwitchA and RouterA.

NOTE: The configuration command has been disabled for both the router and switch in this simulation.



Which of the following is true regarding the configuration of SwitchA?

A. only 5 simultaneous remote connections are possible
B. remote connections using ssh will require a username and password
C. only connections from the local network will be possible
D. console access to SwitchA requires a password

Correct Answer: B
Section: (none)
Explanation

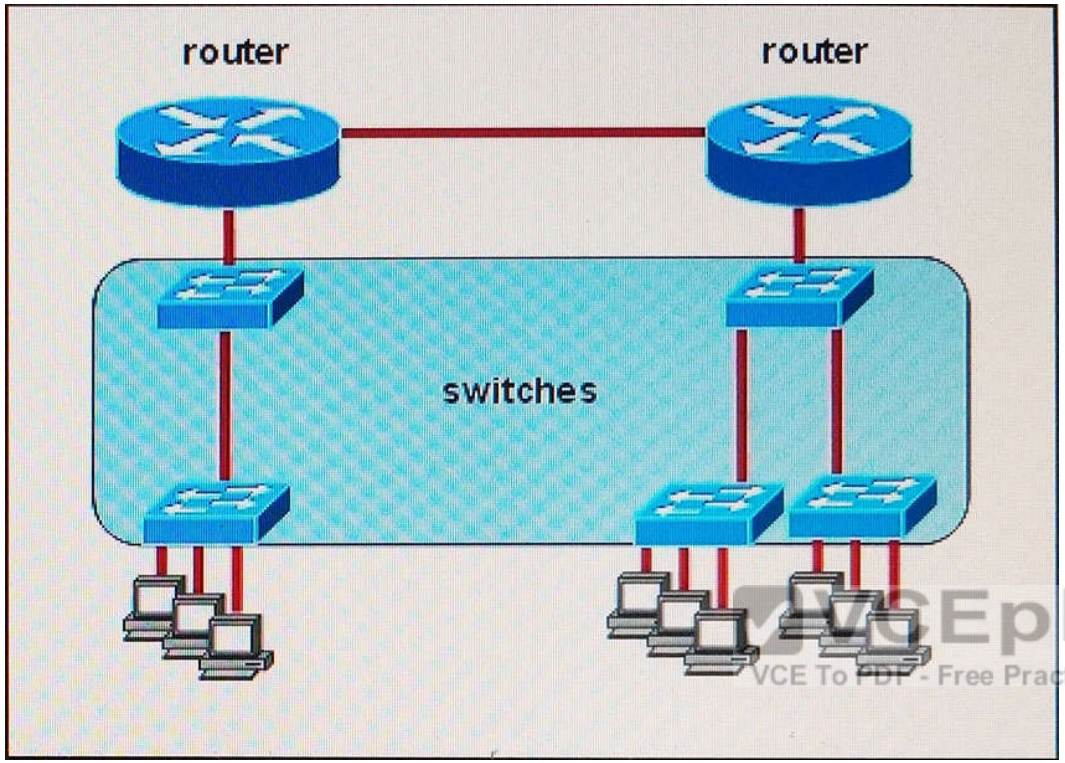
Explanation/Reference:
Explanation:
SWITCH A CONFIGURATION

!
!
no service password-encryption
!
hostname switch1
enable password cisco
username ciscouser password 0 cisco
ip domain-name cisco.com

banner login ^c
********** welcome to Switch1. If you encountered any problem, please consult the administrator ********** ^c

line con 0
line vty 0 4
login local
transport input ssh
line vty 5 15
login local
transport input ssh

QUESTION 88
Refer to the exhibit.



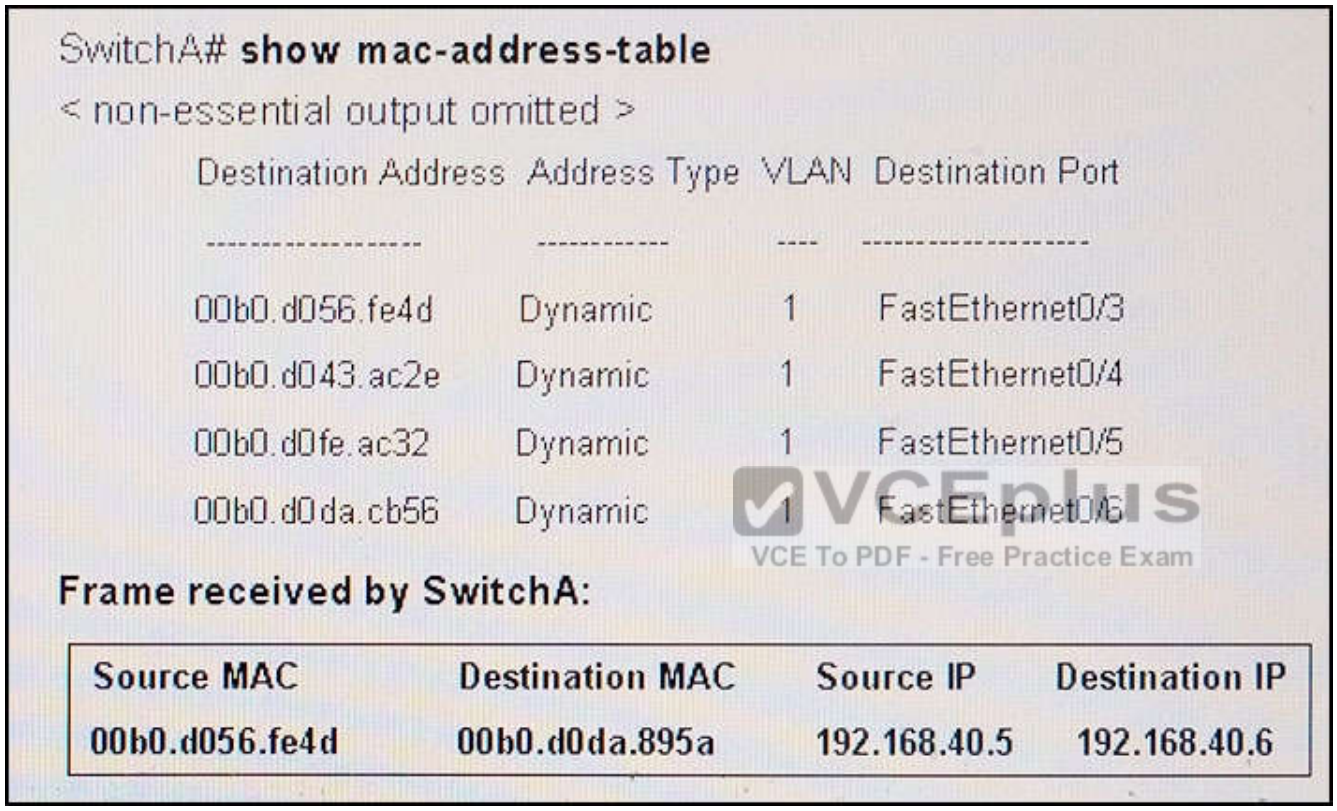
All devices attached to the network are shown. Which number of collision domains are present in this network?

A. 9
B. 3
C. 6
D. 2
E. 15

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:

QUESTION 89
Refer to the exhibit.



Which option describes how SwitchA will handle the frame just received?

A. It will flood the frame out of all the ports except Fa0/3.
B. It will drop the frame.
C. It will flood the frame out all ports.
D. It will forward the frame out of port Fa0/3 only.

Correct Answer: A
Section: (none)

Explanation

Explanation/Reference:

QUESTION 90
Which statement describes the effect of the **exec-timeout 30** command?

A. The router maintains a user session indefinitely after it is active for 30 seconds.
B. The router disconnects the user session if it is inactive for 30 minutes.
C. The router maintains a user session indefinitely after it is active for 30 minutes.
D. The router disconnects a user session if it is inactive for 30 seconds.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Reference: http://www.cisco.com/c/m/en_us/techdoc/dc/reference/cli/nxos/commands/fund/exec-timeout.html

QUESTION 91
Which statement about the default switch configuration for remote access managements is true?

A. The system name is set to Cisco.
B. The Telnet password is set to cisco.
C. No default gateway is defined.
D. One IP address is preconfigured.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 92
Which two VLANs are reserved for system use only? (Choose two.)

A. 2

B. 4095
C. 1001
D. 4096
E. 1
F. 0

Correct Answer: BF
Section: (none)
Explanation

Explanation/Reference:
Explanation:

VLANs	Range	Usage	Propagated by VTP
0, 4095	Reserved	For system use only. You cannot see or use these VLANs.	N/A
1	Normal	Cisco default. You can use this VLAN but you cannot delete it.	Yes
2-1001	Normal	Used for Ethernet VLANs; you can create, use, and delete these VLANs.	Yes
1002-1005	Normal	Cisco defaults for FDDI and Token Ring. You cannot delete VLANs 1002-1005.	Yes
1006-4094	Extended	For Ethernet VLANs only. When configuring extended-range VLANs, note the following: • Layer 3 ports and some software features require internal VLANs. Internal VLANs are allocated from 1006 and up. You cannot use a VLAN that has been allocated for such use. To display the VLANs used internally, enter the **show vlan internal usage** command. • Switches running Catalyst product family software do not support configuration of VLANs 1006-1024. If you configure VLANs 1006-1024, ensure that the VLANs do not extend to any switches running Catalyst product family software. • You must enable the extended system ID to use extended range VLANs. See the "Enabling the Extended System ID" section.	No

Reference: http://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst4500/12-2/25ew/configuration/guide/conf/vlans.html

QUESTION 93
In which circumstance is static routing most useful?

A. on a stub network
B. on a network with frequent routing changes
C. on a network that experiences frequent link failures
D. on a large network that must share routes quickly between routers

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

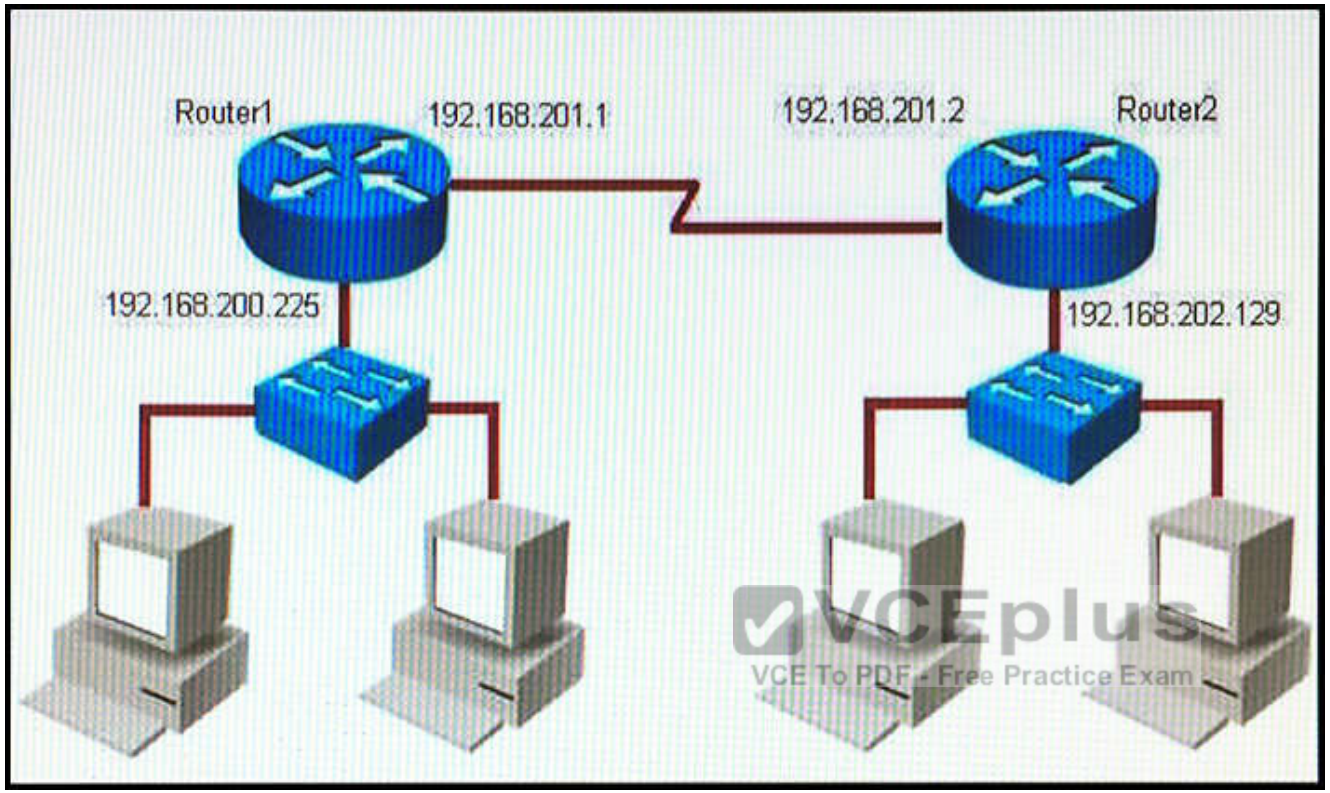
QUESTION 94
Which information is used to install the best route to a destination in IP routing table?

A. the tunnel ID
B. the prefix length
C. the interface number
D. the autonomous system

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 95



Refer to the exhibit. Which command would you use to configure a static route on Router1 to network 192.168.202.0/24 with a nondefault administrative distance?

A. **router1(config)#ip route 192.168.202.0 255.255.255.0 192.168.201.2 1**
B. **router1(config)#ip route 192.168.202.0 255.255.255.0 192.168.201.2 5**
C. **router1(config)#ip route 1 192.168.201.1 255.255.255.0 192.168.201.2**
D. **router1(config)#ip route 5 192.168.202.0 255.255.255.0 192.168.201.2**

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 96
Which sequence begins a unique local IPv6 address in binary notation?

A. 1111110
B. 1111111
C. 00000000
D. 1111100

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 97
If a host experiences intermittent issues that relate to congestion within a network while remaining connected, which option could cause congestion on this LAN?

A. multicasting
B. network segmentation
C. broadcast storms
D. half-duplex operation

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 98
A switch has 48 ports and 4 VLANs. How many collision and broadcast domains exist on the switch (collision, broadcast)?

A. 4,48
B. 48,4
C. 48,1
D. 4,1

E. 1,48

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 99
Which network configuration can you use to segregate broadcast traffic for two different departments in your organization?

A. Configure two VTP domains and configure the switches in transparent mode.
B. Enable spanning-tree load balancing.
C. Implement switch port security on designated ports.
D. Configure a separate VLAN for each department.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 100
Which keyword in a NAT configuration enables the use of one outside IP address for multiple inside hosts?

A. source
B. static
C. pool
D. overload

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

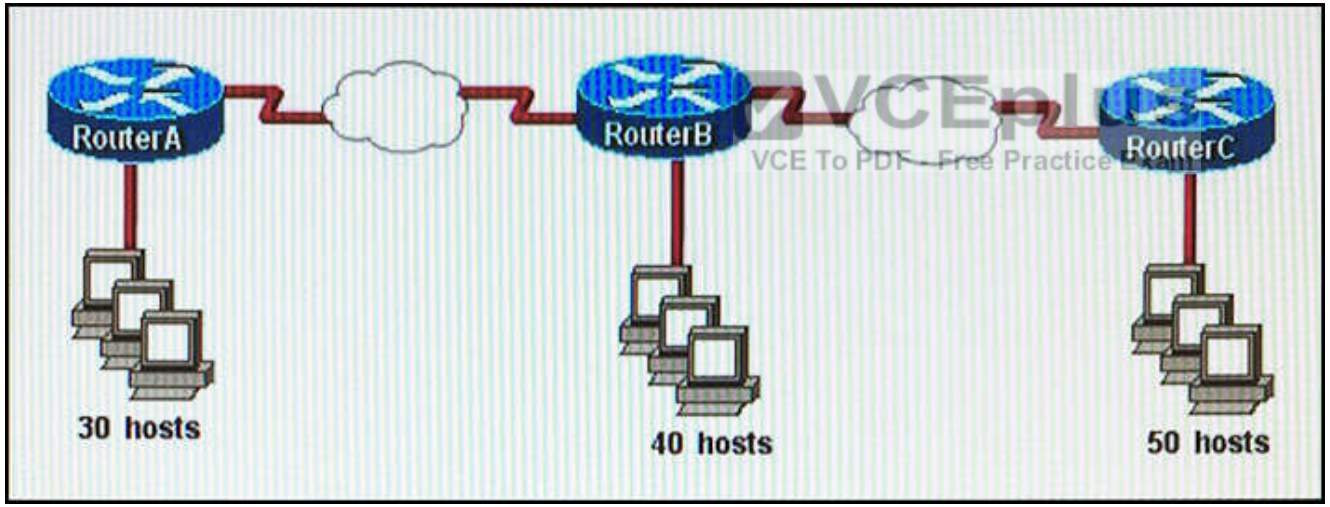
QUESTION 101
Which NAT term is defined as a group of addresses available for NAT use?

A. NAT pool
B. dynamic NAT
C. static NAT
D. one-way NAT

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 102



Refer to the exhibit. The enterprise has decided to use the network address 172.16.0.0. The network administrator needs to design a classful addressing scheme to accommodate the three subnets, with 30, 40, and 50 hosts, as shown. Which subnet mask would accommodate this network?

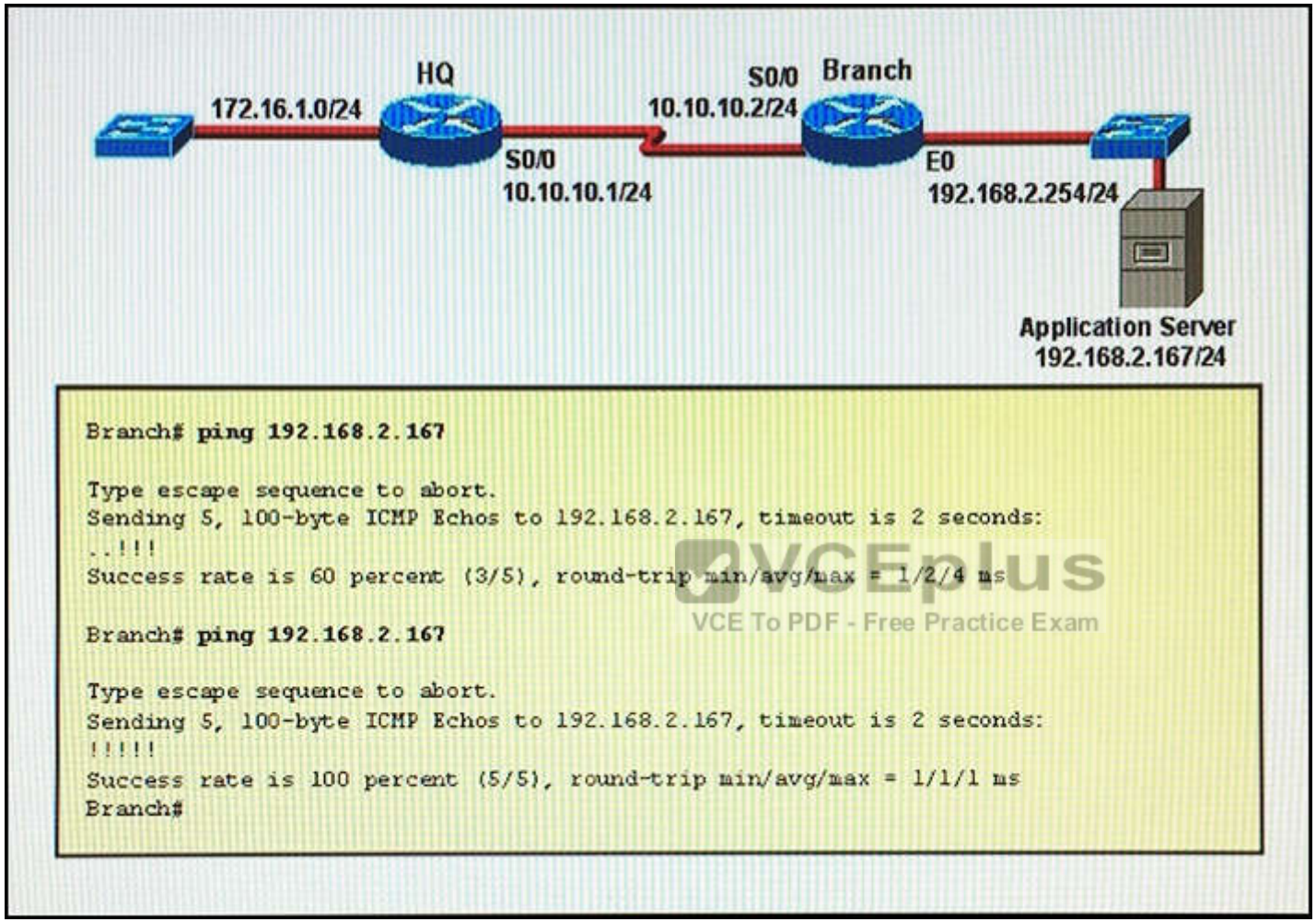
A. 255.255.255.224
B. 255.255.255.240
C. 255.255.255.252

D. 255.255.255.248
E. 255.255.255.192

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:

QUESTION 103



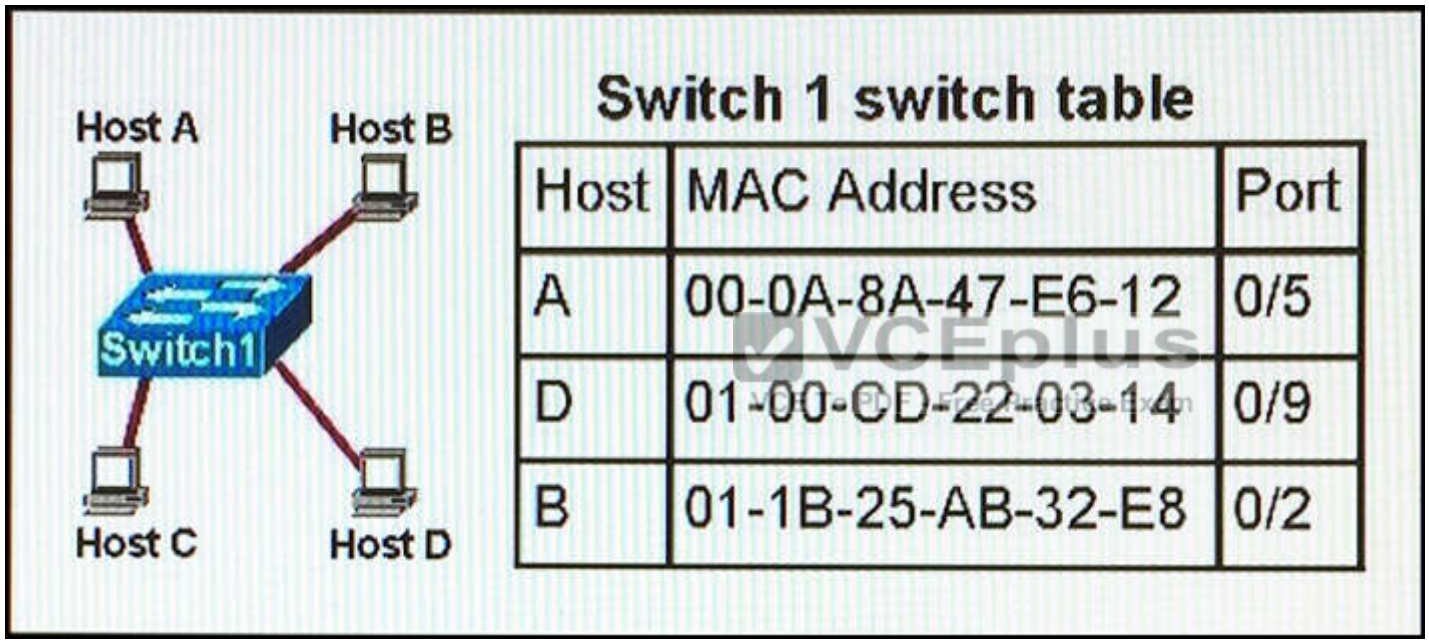
Refer to the exhibit. The network administrator is testing connectivity from the branch router to the newly installed application server. Which reason is the most likely for the first ping having a success rate of only 60 percent?

A. The branch router LAN interface should be upgraded to FastEthernet.
B. The branch router had to resolve the application server MAC address.
C. The network is likely to be congested, with the result that packets are being intermittently dropped.
D. There is a short delay while NAT translates the server IP address.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 104



Refer to the topology and switching table shown in the graphic. Host B sends a frame to Host C. Which option describes what the switch will do with the frame?

A. send an ICMP Host Unreachable message to Host B
B. return the frame to Host B
C. drop the frame
D. send the frame out all ports except port 0/2
E. record the destination MAC address in the switching table and send the frame directly to Host C
F. send an ARP request for Host C

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 105
An administrator has connected devices to a switch and, for security reasons, wants the dynamically learned MAC addresses from the address table added to the running configuration. Which action must be taken to accomplish this?

A. Use the **no switchport port-security** command to allow MAC addresses to be added to the configuration.
B. Enable port security and use the keyword **sticky**.
C. Set the switchport mode to trunk and save the running configuration.
D. Use the **switchport protected** command to have the MAC addresses added to the configuration.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 106
Which port-security feature allows a switch to learn MAC addresses dynamically and add them to the running configuration?

A. security violation restrict mode
B. switch port protection
C. sticky learning
D. security violation protect mode

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:
You can configure an interface to convert the dynamic MAC addresses to sticky secure MAC addresses and to add them to the running configuration by enabling sticky learning. To enable sticky learning, enter the switchport port-security mac-address sticky interface configuration command. When you enter this command,

the interface converts all the dynamic secure MAC addresses, including those that were dynamically learned before sticky learning was enabled, to sticky secure MAC addresses.
Reference: https://learningnetwork.cisco.com/thread/27768

QUESTION 107
Which statement about 6to4 tunneling is true?

A. One tunnel endpoint must be configured with IPv4 only.
B. Both tunnel endpoint must be configured with IPv4 only.
C. It establishes a point-to-point tunnel.
D. Both tunnel endpoints must support IPv4 and IPv6.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 108
An administrator is working with the 192.168.4.0 netwrok, which has been subnetted with a /26 mask. Which two addresses can be assigned to hosts within the same subnet? (Choose two.)

A. 192.168.4.67
B. 192.168.4.61
C. 192.168.4.128
D. 192.168.4.132
E. 192.168.4.125
F. 192.168.4.63

Correct Answer: AE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 109
Which adverse situation can occur if an Ethernet cable is too long?

A. late collisions
B. giants
C. interface resets
D. runts

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 110
Which statement about NTP is true?

A. The default authentication key number is 1.
B. The default source address of an NTP message is the interface connected to the next-hop for the server peer address.
C. The default stratum number is 5.
D. Each device is enabled as a server by default and propagates NTP messages to all peers on its default LAN.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 111
Which statement about routing protocols is true?

A. Distance-vector routing protocols use the Shortest Path First algorithm.
B. OSPF is a link-state routing protocol.
C. IS-IS is a distance-vector routing protocol.
D. Link-state routing protocols choose a path by the number of hops to the destination.

Correct Answer: B
Section: (none)

Explanation

Explanation/Reference:

QUESTION 112

```
R1(config)#ip nat pool cisco 10.1.1.0 10.1.1.50 255.255.255.0
```

Refer to the exhibit. Which feature is enabled by this configuration?

A. static NAT translation
B. a DHCP pool
C. a dynamic NAT address pool
D. PAT

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 113
Which statement about DHCP address pools is true?

A. A network must be defined before you can configure a manual binding.
B. Only one DNS server can be identified for an individual DHCP group.
C. You can use a subnet mask of prefix length to define a network.
D. The domain name of the DHCP pool is specified in the global configuration of the router.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 114
How does a Layer 2 switch differ from a hub?

A. A switch tracks MAC addresses of directly-connected devices.
B. A switch always induces latency into the frame transfer time.
C. A switch operates at a lower, more efficient layer of the OSI model.
D. A switch decreases the number of collision domains.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 115
Which feature automatically disables Cisco Express Forwarding when it is enabled?

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

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:
If you enable Cisco Express Forwarding and then create an access list that uses the logkeyword, the packets that match the access list are not Cisco Express Forwarding switched. They are process switched. Logging disables Cisco Express Forwarding.
Reference: http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipswitch_cef/configuration/12-4t/isw-cef-12-4t-book/isw-cef-enable-disable.html

QUESTION 116
How many primary IPv4 addresses can be assigned to an interface?

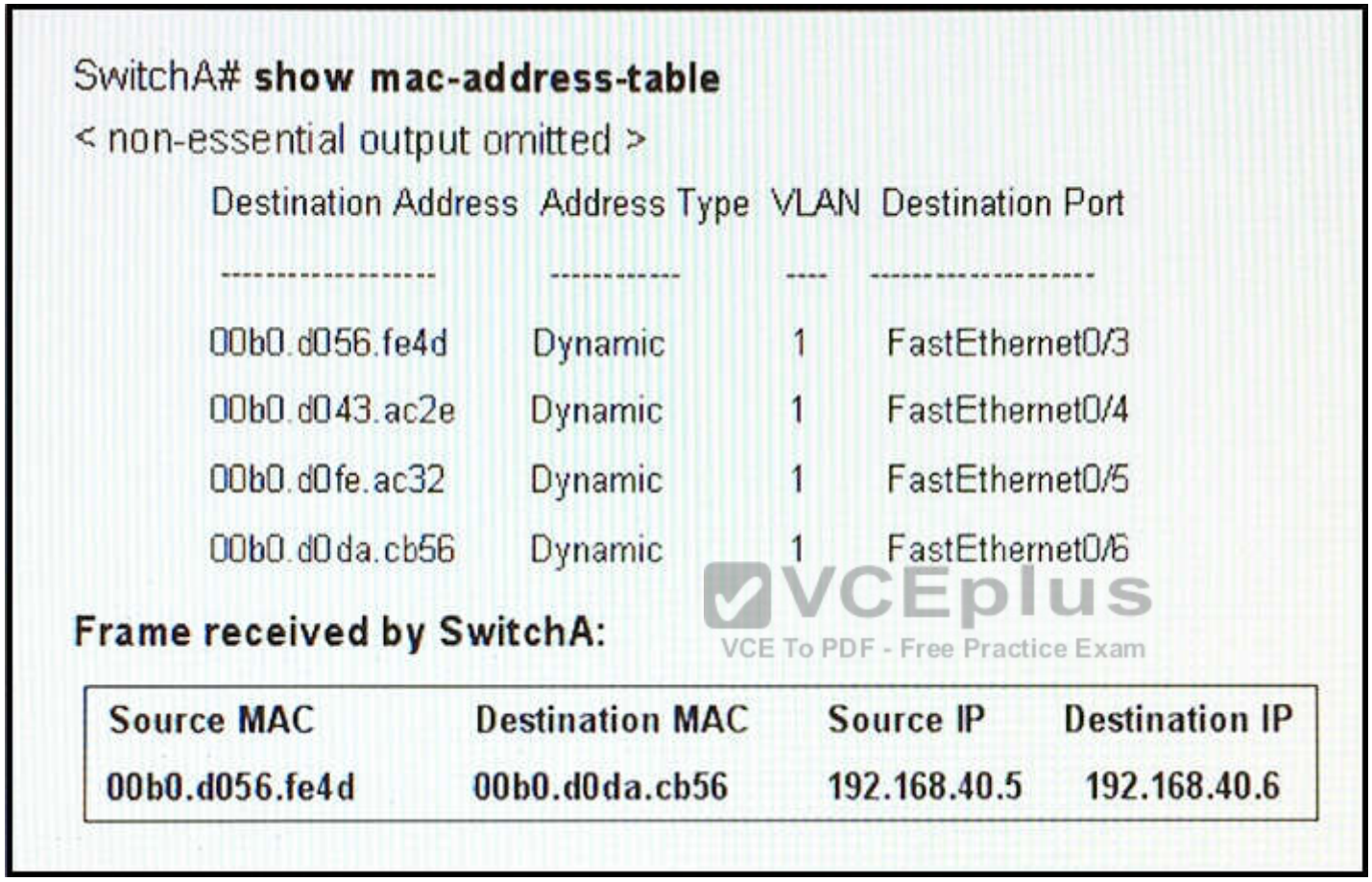
A. unlimited
B. 8

C. 2
D. 1

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Cisco IOS software supports multiple IP addresses per interface. You can specify an unlimited number of secondary addresses.
Reference: http://www.cisco.com/c/en/us/td/docs/ios/12_2/ip/configuration/guide/fipr_c/1cfipadr.html

QUESTION 117



Refer to the exhibit. Which option describes how SwitchA will handle the frame just received?

A. It will flood the frame out of all the ports except Fa0/3.
B. It will drop the frame.
C. It will flood the frame out all ports.
D. It will forward the frame out of port Fa0/3 only.
E. It will forward the frame out of port Fa0/6 only.

Correct Answer: E

Section: (none)
Explanation

Explanation/Reference: