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Time Remaining: 2:45:52

Item 6 of 38 (Exam A, Q245)

[Show Answer](#)[Calculator](#)

If you have overlapping IP address between two different networks or routing domains, which two commands are needed to globally configure NAT to get this to work?

- A. ip nat outside source static udp x.x.x.x y.y.y.y and ip nat inside source udp x.x.x.x y.y.y.y
- B. ip nat outside source static x.x.x.x y.y.y.y and ip nat inside source static x.x.x.x y.y.y.y
- C. ip nat outside source static tcp x.x.x.x y.y.y.y and ip nat outside source tcp x.x.x.x y.y.y.y
- D. ip nat outside source list 1 interface x and ip nat inside source list 1 interface x

Select the best choice.

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Item 6 of 38 (Exam A, Q245)

If you have overlapping IP address between two different networks or routing domains, which two commands are needed to globally configure NAT to get this to work?

- A. `ip nat outside source static udp x.x.x.x y.y.y.y` and `ip nat inside source udp x.x.x.x y.y.y.y`
- B. `ip nat outside source static x.x.x.x y.y.y.y` and `ip nat inside source static x.x.x.x y.y.y.y`
- C. `ip nat outside source static tcp x.x.x.x y.y.y.y` and `ip nat outside source tcp x.x.x.x y.y.y.y`
- D. `ip nat outside source list 1 interface x` and `ip nat inside source list 1 interface x`

Answer: B

Section: IP Routing

Select the best choice.

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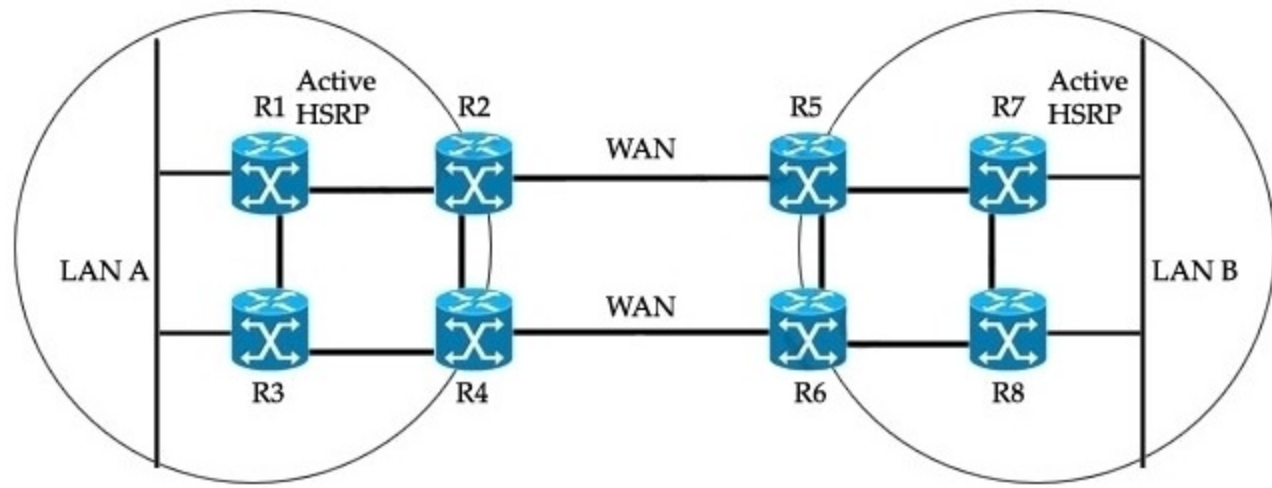
End Exam

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Show Answer Calculator

Item 7 of 38 (Exam A, Q208)

Refer to the exhibit.
 There are two sites connected across WAN links. All intersite and intrasite links always have the same routing metric.
 The network administrator sees only the top routers and links being used by hosts at both LAN A and LAN B.
 What would be two suggestions to load-balance the traffic across both WAN links? (Choose two.)



- A. Make HSRP track interfaces between the edge and core routers.
- B. Replace HSRP with GLBP.
- C. Add crossed intrasite links: R1-R4, R2-R3, R5-R8, and R6-R7.
- D. Make R3 and R8 have lower HSRP priority than R1 and R7.
- E. Replace HSRP with VRRP.

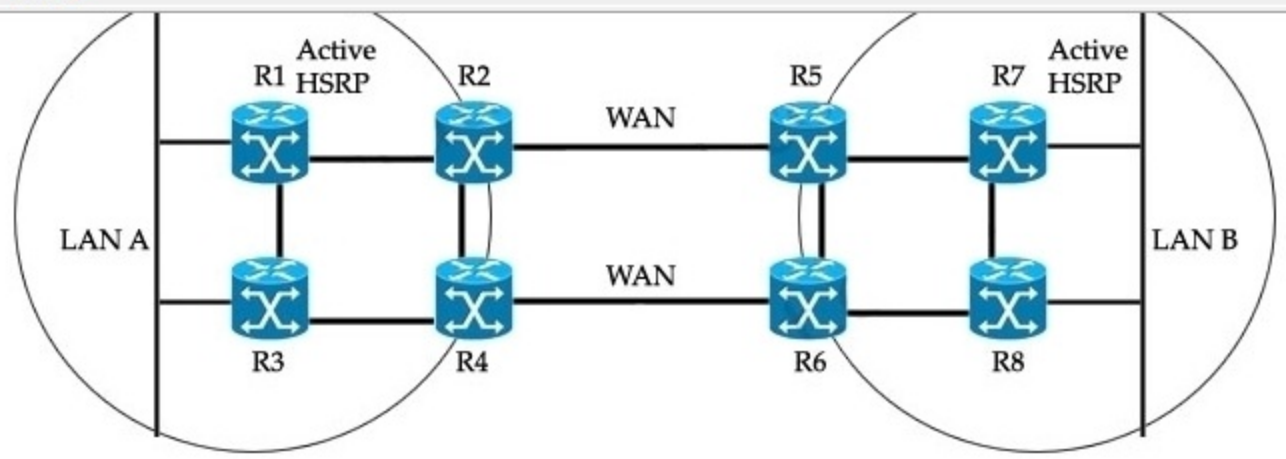
Select all that apply.

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- A. Make HSRP track interfaces between the edge and core routers.
- B. Replace HSRP with GLBP.
- C. Add crossed intrasite links: R1-R4, R2-R3, R5-R8, and R6-R7.
- D. Make R3 and R8 have lower HSRP priority than R1 and R7.
- E. Replace HSRP with VRRP.

Answer: BC
Section: IP Routing

The administrator sees only the top routers (R1,R2,R5 & R7) and links being used by hosts at both LAN A and LAN B because R1 & R7 are currently active HSRP routers (notice that all the data will need to go through these routers).
 Next, all intersite and intrasite links have the same routing metric so these active routers will send packets to R2 or R5, not R3, R4, R6 or R8 because of the lower metric of the top routers.
 For example, hosts in LAN A want to send data to hosts in LAN B, they will send data to R1 -> R2 -> R5 -> R7, which has lower metric than the path R1 -> R3 -> R4 -> R6 -> R5 (or R8) -> R7.
 To make the network better, we should add crossed intrasite links so that R1 & R7 can send data to both R2/R4 & R5/R6 as they have the same routing metric now -> C is correct.
 Cisco Gateway Load Balancing Protocol (GLBP) differs from Cisco Hot Standby Redundancy Protocol (HSRP) and IETF RFC 3768 Virtual Router Redundancy Protocol (VRRP) in that it has the ability to load balance over multiple gateways.
 Like HSRP and VRRP an election occurs, but rather than a single active router winning the election, GLBP elects an Active Virtual Gateway (AVG) to assign virtual MAC addresses to each of the other GLBP routers and to assign each network host to one of the GLBP routers -> B is correct.
 Note: The routers that receive this MAC address assignment are known as Active Virtual Forwarders (AVF).

Select all that apply.

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Time Remaining: 2:45:13

Item 8 of 38 (Exam A, Q287)

[Show Answer](#)[Calculator](#)

Refer to the exhibit.

Given this output, to which address or location will the router forward a packet sent to 192.168.32.1?

```
R#show ip route
```

```
D 192.168.32.0/26 [90/25789217] via 10.1.1.1
```

```
R 192.168.32.0/24 [120/4] via 10.1.1.2
```

```
O 192.168.32.0/19 [110/229840] via 10.1.1.3
```

- A. 10.1.1.1
- B. 10.1.1.2
- C. 10.1.1.3
- D. the default gateway

Select the best choice.

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Calculator

Item 8 of 38 (Exam A, Q287)

Refer to the exhibit.

Given this output, to which address or location will the router forward a packet sent to 192.168.32.1?

```
R#show ip route
```

```
D 192.168.32.0/26 [90/25789217] via 10.1.1.1
```

```
R 192.168.32.0/24 [120/4] via 10.1.1.2
```

```
O 192.168.32.0/19 [110/229840] via 10.1.1.3
```

- A. 10.1.1.1
- B. 10.1.1.2
- C. 10.1.1.3
- D. the default gateway

Answer: A

Section: IP Routing

A router forwards the traffic based on the longer prefix match and the shortest administrative distance. In this case the route via 10.1.1.1 has a /26 subnet mask and an AD of 90 as this is using EIGRP. Therefore the router will use this route to connect to 192.168.32.1.

Select the best choice.

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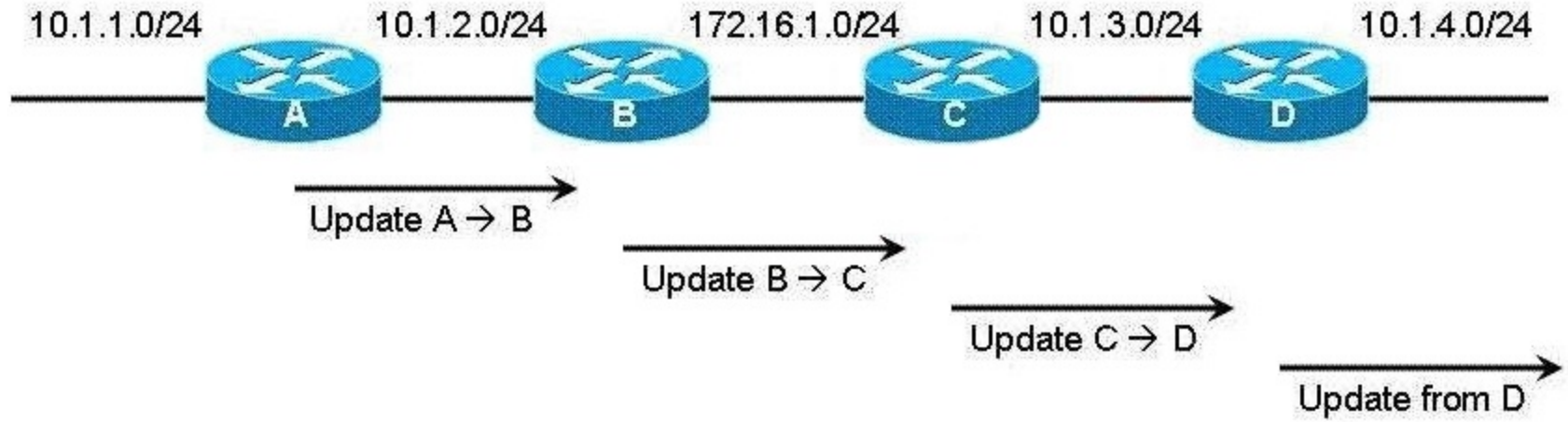
End Exam

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Show Answer Calculator

Item 9 of 38 (Exam A, Q203)

Refer to the exhibit.
 This network is using a classful routing protocol. Subnet 10.1.1.0/24 is sourced by Router A and advertised to Router B. Router B then sends updates to Router C, which forwards updates to Router D, which propagates routing information beyond. With regards to only the 10.1.1.0/24 subnet, what does Router D advertise out its 10.1.4.0/24 interface?



- A. 10.1.1.0
- B. 10.1.1.0/24
- C. 10.0.0.0
- D. 10.0.0.0/8
- E. No update is sent regarding the 10.1.1.0/24 subnet

Select the best choice.

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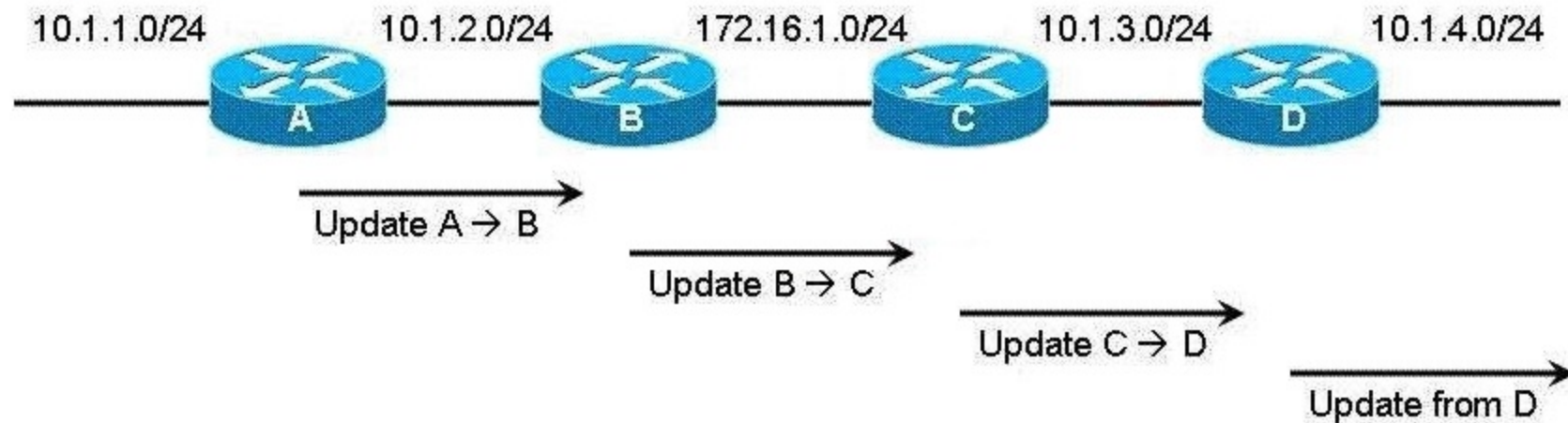
Hide Answer

Calculator

Item 9 of 38 (Exam A, Q203)

Refer to the exhibit.

This network is using a classful routing protocol. Subnet 10.1.1.0/24 is sourced by Router A and advertised to Router B. Router B then sends updates to Router C, which forwards updates to Router D, which propagates routing information beyond. With regards to only the 10.1.1.0/24 subnet, what does Router D advertise out its 10.1.4.0/24 interface?



- A. 10.1.1.0
- B. 10.1.1.0/24
- C. 10.0.0.0
- D. 10.0.0.0/8
- E. No update is sent regarding the 10.1.1.0/24 subnet

Answer: E
Section: IP Routing

Select the best choice.

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Item 10 of 38 (Exam A, Q157)

[Show Answer](#)[Calculator](#)

Unicast Reverse Path Forwarding can perform all of these actions except which one?

- A. examine all packets received to make sure that the source addresses and source interfaces appear in the routing table and match the interfaces where the packets were received
- B. check to see if any packet received at a router interface arrives on the best return path
- C. combine with a configured ACL
- D. log its events, if you specify the logging options for the ACL entries used by the unicast rpf command
- E. inspect IP packets encapsulated in tunnels, such as GRE

Select the best choice.

100%

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Hide Answer

Calculator

Item 10 of 38 (Exam A, Q157)

Unicast Reverse Path Forwarding can perform all of these actions except which one?

- A. examine all packets received to make sure that the source addresses and source interfaces appear in the routing table and match the interfaces where the packets were received
- B. check to see if any packet received at a router interface arrives on the best return path
- C. combine with a configured ACL
- D. log its events, if you specify the logging options for the ACL entries used by the unicast rpf command
- E. inspect IP packets encapsulated in tunnels, such as GRE

Answer: E

Section: IP Routing

For RPF to function, CEF must be enabled on the router. This is because the router uses the Forwarding Information Base (FIB) of CEF to perform the lookup process, which is built from the router's routing table. In other words, RPF does not really look at the router's routing table; instead, it uses the CEF FIB to determine spoofing.

Also, RPF cannot detect all spoofed packets. For the network in this example, the perimeter router cannot determine spoofing from packets received on the external E1 interface if they match the default route statement.

Therefore, the more routes your router has in its CEF FIB table, the more likely the router will be capable of detecting spoofing attacks. In addition, RPF cannot detect any spoofed packets that are encapsulated, such as packets encapsulated in GRE, IPSec, L2TP, and other packets.

Network administrators can use Unicast Reverse Path Forwarding (Unicast RPF) to help limit the malicious traffic on an enterprise network. This security feature works by enabling a router to verify the reachability of the source address in packets being forwarded. This capability can limit the appearance of spoofed addresses on a network. If the source IP address is not valid, the packet is discarded. Unicast RPF works in one of three different modes: strict mode, loose mode, or VRF mode. Note that not all network devices support all three modes of operation. Unicast RPF in VRF mode will not be covered in this document.

When administrators use Unicast RPF in strict mode, the packet must be received on the interface that the router would use to forward the return packet. Unicast RPF configured in strict mode may drop legitimate traffic that is received on an interface that was not the router's choice for sending return traffic. Dropping this legitimate traffic could occur when asymmetric routing paths are present in the network.

When administrators use Unicast RPF in loose mode, the source address must appear in the routing table. Administrators can change this behavior using the allow-default option, which allows the use of the default route in the source verification process. Additionally, a packet that contains a source address for which the return route points to the Null 0 interface will be dropped. An access list may also be specified that permits or denies certain source addresses in Unicast RPF loose mode.

Care must be taken to ensure that the appropriate Unicast RPF mode (loose or strict) is configured during the deployment of this feature because it can drop legitimate traffic. Although asymmetric traffic flows may be of concern when deploying this feature, Unicast RPF loose mode is a scalable option for networks that contain asymmetric routing paths. Unicast RPF in an Enterprise Network In many enterprise environments, it is necessary to use a combination of strict mode and loose mode Unicast RPF. The choice of the Unicast RPF mode that will be used will depend on the design of the network segment connected to the interface on which Unicast RPF is deployed. Administrators should use Unicast RPF in strict mode on network interfaces for which all packets received on an interface are guaranteed to originate from the subnet assigned to the interface. A subnet composed of end stations or network resources fulfills this requirement. Such a design would be in place for an access layer network or a branch office where there is only one path into and out of the branch network. No other traffic originating from the subnet is allowed and no other routes are available past the subnet. Unicast RPF loose mode can be used on an uplink network interface that has a default route associated with it.

Reference

<http://www.cisco.com/web/about/security/intelligence/unicast-rpf.html>

Select the best choice.

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Show Answer

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Item 11 of 38 (Exam A, Q62)

Refer to the exhibit.
Which action would make the router the active VRRP router?

```
Router#show vrrp
Ethernet0/0 - Group 30
  State is Backup
  virtual IP address is 10.1.1.30
  virtual MAC address is 0000.5e00.011e
  Advertisement interval is 1.000 sec
  Preemption enabled
  Priority is 45 (cfgd 100)
    Track object 1 state Down decrement 55
    Track object 2 state Up decrement 55
  Master Router is 10.1.1.101, priority is 50
  Master Advertisement interval is 1.000 sec
  Master Down interval is 3.414 sec (expires in 2.982 sec)

Router#show run | inc track
track 1 interface Serial1/0 line-protocol
track 2 interface Serial1/1 line-protocol
```

- A. Recover interface Serial 1/0.
- B. Increase priority in the configuration to 100.
- C. Change the interface tracking priority to 100.
- D. Recover interface Serial 1/1.

Select the best choice.

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Item 11 of 38 (Exam A, Q62)

Refer to the exhibit.
Which action would make the router the active VRRP router?


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Router#show vrrp
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  Advertisement interval is 1.000 sec
  Preemption enabled
  Priority is 45 (cfgd 100)
    Track object 1 state Down decrement 55
    Track object 2 state Up decrement 55
  Master Router is 10.1.1.101, priority is 50
  Master Advertisement interval is 1.000 sec
  Master Down interval is 3.414 sec (expires in 2.982 sec)
```

```
Router#show run | inc track
track 1 interface Serial1/0 line-protocol
track 2 interface Serial1/1 line-protocol
```

- A. Recover interface Serial 1/0.
- B. Increase priority in the configuration to 100.
- C. Change the interface tracking priority to 100.
- D. Recover interface Serial 1/1.

Answer: A
Section: IP Routing

Select the best choice.

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Item 12 of 38 (Exam A, Q440)

[Show Answer](#)[Calculator](#)

Which two statements are true about the Inside Global address in NAT? (Choose two.)

- A. the IP address of an inside host as it appears to the outside network
- B. the IP address of an outside host as it appears to the inside network
- C. if the enterprise is connected to the global Internet, this address can be allocated from a globally unique address space
- D. if the enterprise is connected to the global Internet, this address can be allocated from the space defined by RFC 1918

Select all that apply.

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Mark

Hide Answer

Calculator

Item 12 of 38 (Exam A, Q440)

Which two statements are true about the Inside Global address in NAT? (Choose two.)

- A. the IP address of an inside host as it appears to the outside network
- B. the IP address of an outside host as it appears to the inside network
- C. if the enterprise is connected to the global Internet, this address can be allocated from a globally unique address space
- D. if the enterprise is connected to the global Internet, this address can be allocated from the space defined by RFC 1918

Answer: AC

Section: IP Routing

Select all that apply.

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Item 13 of 38 (Exam A, Q191)

Your company is researching a new application that runs over IPv6, but part of it must still have IPv4 support. Your company uses a traditional IPv4 network. Your plan is not to run IPv6 over the whole network, but to segment parts of the network or even to operate simultaneously with IPv6 and IPv4. You must make a brief presentation about IPv6 technology to the board of technical directors. Which three of these items could be part of your presentation? (Choose three.)

- A. Tunnel IPv6 over IPv4 to connect far-end IPv6 networks.
- B. Explain why configuring IPv4 and IPv6 at the same time over the same LAN interface is not possible.
- C. Explain why configuring IPv4 and IPv6 at the same time over the same LAN interface is possible.
- D. What is the meaning of EUI-64 and how does it work?
- E. Tunnel IPv4 over IPv6 to connect far-end IPv4 networks.

Select all that apply.

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Item 13 of 38 (Exam A, Q191)

Your company is researching a new application that runs over IPv6, but part of it must still have IPv4 support. Your company uses a traditional IPv4 network. Your plan is not to run IPv6 over the whole network, but to segment parts of the network or even to operate simultaneously with IPv6 and IPv4. You must make a brief presentation about IPv6 technology to the board of technical directors. Which three of these items could be part of your presentation? (Choose three.)

- A. Tunnel IPv6 over IPv4 to connect far-end IPv6 networks.
- B. Explain why configuring IPv4 and IPv6 at the same time over the same LAN interface is not possible.
- C. Explain why configuring IPv4 and IPv6 at the same time over the same LAN interface is possible.
- D. What is the meaning of EUI-64 and how does it work?
- E. Tunnel IPv4 over IPv6 to connect far-end IPv4 networks.

Answer: ACD

Section: IP Routing

An interface ID is used to identify interfaces on a link. The interface ID must be unique to the link. It may also be unique over a broader scope. In many cases, an interface ID will be the same as or based on the link-layer address of an interface. Interface IDs used in aggregatable global unicast and other IPv6 address types must be 64 bits long and constructed in the modified EUI-64 format. Interface IDs are constructed in the modified EUI-64 format in one of the following ways:

For all IEEE 802 interface types (for example, Ethernet, and FDDI interfaces), the first three octets (24 bits) are taken from the Organizationally Unique Identifier (OUI) of the 48-bit link-layer address (the Media Access Control [MAC] address) of the interface, the fourth and fifth octets (16 bits) are a fixed hexadecimal value of FFFE, and the last three octets (24 bits) are taken from the last three octets of the MAC address. The construction of the interface ID is completed by setting the Universal/Local (U/L) bit the seventh bit of the first octet a value of 0 or 1. A value of 0 indicates a locally administered identifier; a value of 1 indicates a globally unique IPv6 interface identifier.

For other interface types (for example, serial, loopback, ATM, Frame Relay, and tunnel interface types except tunnel interfaces used with IPv6 overlay tunnels), the interface ID is constructed in the same way as the interface ID for IEEE 802 interface types; however, the first MAC address from the pool of MAC addresses in the router is used to construct the identifier (because the interface does not have a MAC address).

For tunnel interface types that are used with IPv6 overlay tunnels, the interface ID is the IPv4 address assigned to the tunnel interface with all zeros in the high-order 32 bits of the identifier. An IPv4-compatible IPv6 address is an IPv6 unicast address that has zeros in the high-order 96 bits of the address and an IPv4 address in the low-order 32 bits of the address. The format of an IPv4-compatible IPv6 address is 0:0:0:0:0:A.B.C.D or ::A.B.C.D. The entire 128-bit IPv4-compatible IPv6 address is used as the IPv6 address of a node and the IPv4 address embedded in the low-order 32 bits is used as the IPv4 address of the node. IPv4-compatible IPv6 addresses are assigned to nodes that support both the IPv4 and IPv6 protocol stacks and are used in automatic tunnels.

Select all that apply.

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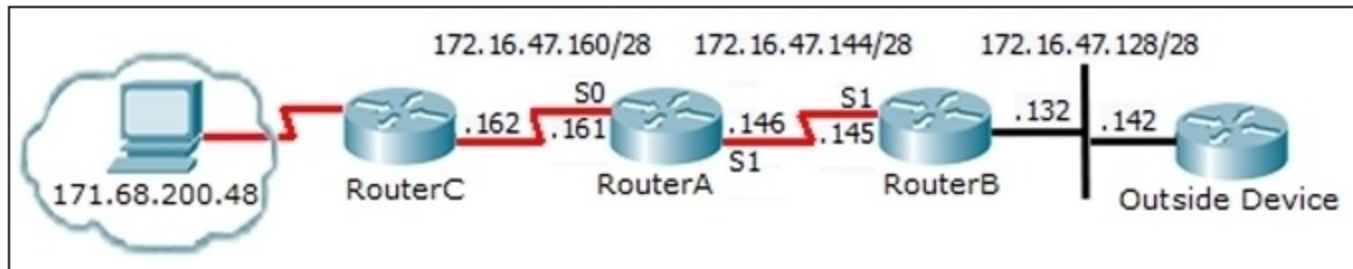
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Show Answer Calculator

Item 14 of 38 (Exam A, Q136)

Refer to the exhibit.
 This exhibit shows the NAT configuration for Router A and the output for a ping issued from device 171.68.200.48 and destined to 172.16.47.142.
 Based on this information, what change must be made to Router A in order for the ping to work?



```
!
ip nat inside source static 171.68.200.48 172.16.47.150
interface Serial0
ip address 172.16.47.161 255.255.255.240
ip nat inside
!
interface Serial1
ip address 172.16.47.146 255.255.255.240
ip nat outside
!
no ip classless
ip route 0.0.0.0 0.0.0.0 172.16.47.162

Router-A#show ip nat translation
Pro Inside global      Inside local      outside local      outside global
--- 172.16.47.150      171.68.200.48    ---                ---

Router-A#debug ip packet detail
Router-A#debug ip nat
Router-A#IP: s=171.68.200.48 (Serial0), d=172.16.47.142, len 100, unroutable
      ICMP type=8, code=0
Router-A#IP: s=172.16.47.161 (local), d=171.68.200.48 (Serial0), len 56, sending
      ICMP type=3, code=1
Router-A#IP: s=171.68.200.48 (Serial0), d=172.16.47.142, len 100, unroutable
```

Select the best choice.

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```
ip nat inside
!
interface Serial1
ip address 172.16.47.146 255.255.255.240
ip nat outside
!
no ip classless
ip route 0.0.0.0 0.0.0.0 172.16.47.162

Router-A#show ip nat translation
Pro Inside global      Inside local      outside local      outside global
--- 172.16.47.150      171.68.200.48    ---                ---

Router-A#debug ip packet detail
Router-A#debug ip nat
Router-A#IP: s=171.68.200.48 (Serial0), d=172.16.47.142, len 100, unroutable
ICMP type=8, code=0
Router-A#IP: s=172.16.47.161 (local), d=171.68.200.48 (Serial0), len 56, sending
ICMP type=3, code=1
Router-A#IP: s=171.68.200.48 (Serial0), d=172.16.47.142, len 100, unroutable
ICMP type=8, code=0
Router-A#IP: s=171.68.200.48 (Serial0), d=172.16.47.142, len 100, unroutable
ICMP type=8, code=0
Router-A#IP: s=172.16.47.161 (local), d=171.68.200.48 (Serial0), len 56, sending
ICMP type=3, code=1
Router-A#IP: s=171.68.200.48 (Serial0), d=172.16.47.142, len 100, unroutable
ICMP type=8, code=0
Router-A#IP: s=171.68.200.48 (Serial0), d=172.16.47.142, len 100, unroutable
ICMP type=8, code=0
Router-A#IP: s=172.16.47.161 (local), d=171.68.200.48 (Serial0), len 56, sending
ICMP type=3, code=1
```

- A. reload the router
- B. clear the route cache
- C. add a static route
- D. configure IP as classless
- E. load a newer IOS image

Select the best choice.

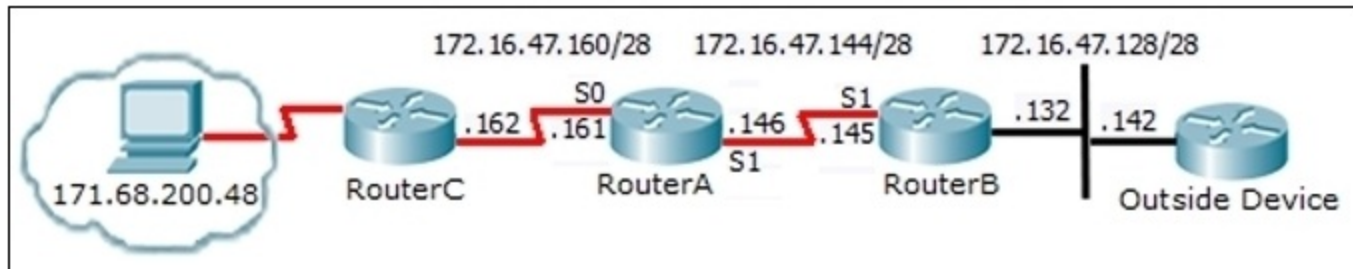
100%

Mark

Hide Answer Calculator

Item 14 of 38 (Exam A, Q136)

Refer to the exhibit.
 This exhibit shows the NAT configuration for Router A and the output for a ping issued from device 171.68.200.48 and destined to 172.16.47.142.
 Based on this information, what change must be made to Router A in order for the ping to work?



```
!
ip nat inside source static 171.68.200.48 172.16.47.150
interface Serial0
ip address 172.16.47.161 255.255.255.240
ip nat inside
!
interface Serial1
ip address 172.16.47.146 255.255.255.240
ip nat outside
!
no ip classless
ip route 0.0.0.0 0.0.0.0 172.16.47.162

Router-A#show ip nat translation
Pro Inside global      Inside local      outside local      outside global
--- 172.16.47.150      171.68.200.48    ---                ---

Router-A#debug ip packet detail
Router-A#debug ip nat
Router-A#IP: s=171.68.200.48 (Serial0), d=172.16.47.142, len 100, unroutable
      ICMP type=8, code=0
Router-A#IP: s=172.16.47.161 (local), d=171.68.200.48 (Serial0), len 56, sending
      ICMP type=3, code=1
Router-A#IP: s=171.68.200.48 (Serial0), d=172.16.47.142, len 100, unroutable
```

Select the best choice.

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```
!
no ip classless
ip route 0.0.0.0 0.0.0.0 172.16.47.162

Router-A#show ip nat translation
Pro  Inside global      Inside local    outside local   outside global
---  172.16.47.150        171.68.200.48   ---             ---

Router-A#debug ip packet detail
Router-A#debug ip nat
Router-A#IP: s=171.68.200.48 (Serial0), d=172.16.47.142, len 100, unroutable
      ICMP type=8, code=0
Router-A#IP: s=172.16.47.161 (local), d=171.68.200.48 (Serial0), len 56, sending
      ICMP type=3, code=1
Router-A#IP: s=171.68.200.48 (Serial0), d=172.16.47.142, len 100, unroutable
      ICMP type=8, code=0
Router-A#IP: s=171.68.200.48 (Serial0), d=172.16.47.142, len 100, unroutable
      ICMP type=8, code=0
Router-A#IP: s=172.16.47.161 (local), d=171.68.200.48 (Serial0), len 56, sending
      ICMP type=3, code=1
Router-A#IP: s=171.68.200.48 (Serial0), d=172.16.47.142, len 100, unroutable
      ICMP type=8, code=0
Router-A#IP: s=171.68.200.48 (Serial0), d=172.16.47.142, len 100, unroutable
      ICMP type=8, code=0
Router-A#IP: s=172.16.47.161 (local), d=171.68.200.48 (Serial0), len 56, sending
      ICMP type=3, code=1
```

- A. reload the router
- B. clear the route cache
- C. add a static route
- D. configure IP as classless
- E. load a newer IOS image

Answer: D
Section: IP Routing

Select the best choice.

100%

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Item 15 of 38 (Exam A, Q256)

[Show Answer](#)[Calculator](#)

Policy-based routing allows network administrators to implement routing policies to allow or deny paths based on all of these factors except which one?

- A. End system
- B. Protocol
- C. Application
- D. Throughput

Select the best choice.

100%

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Time Remaining: 2:41:41

Item 15 of 38 (Exam A, Q256)

[Hide Answer](#)[Calculator](#)

Policy-based routing allows network administrators to implement routing policies to allow or deny paths based on all of these factors except which one?

- A. End system
- B. Protocol
- C. Application
- D. Throughput

Answer: D
Section: IP Routing

Select the best choice.

100%

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Mark

Time Remaining: 2:41:06

Item 16 of 38 (Exam A, Q260)


Show Answer

Calculator

For the following protocols, which one provides a mechanism to transparently intercept and redirect CIFS traffic from a client to a local Cisco Wide Area Application engine?

- A. Virtual Router Redundancy Protocol (VRRP)
- B. File Transport Protocol (FTP)
- C. Hot Standby Routing Protocol (HSRP)
- D. Web Cache Communication Protocol (WCCP)

Select the best choice.

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Mark D. Web Cache Communication Protocol (WCCP)

Answer: D

Section: IP Routing

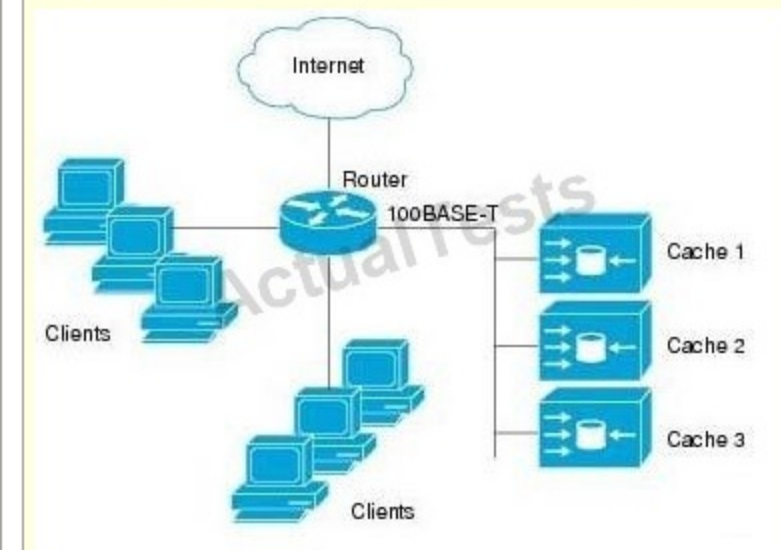
Web Cache Control Protocol

Description

The Web Cache Control Protocol (WCCP) feature allows you to use a Cisco Cache Engine to handle web traffic, thus reducing transmission costs and downloading time.

This traffic includes user requests to view pages and graphics on World Wide Web servers, whether internal or external to your network, and the replies to those requests. shows a sample WCCP network configuration.

Figure 1 Sample Cisco Cache Engine Network Configuration



When a user (client) requests a page from a web server (located in the Internet, in this case), the router sends the request to a Cisco Cache Engine (Cache 1, Cache 2, or Cache 3).

If the cache engine has a copy of the requested page in storage, the engine sends the user that page. Otherwise, the engine gets the requested page and the objects on that page from the web server, stores a copy of the page and its objects (caches them), and forwards the page and objects to the user.

WCCP transparently redirects HTTP requests from the intended server to a Cisco Cache Engine. End users do not know that the page came from the cache engine rather than the originally requested web server. The Using the Cisco Cache Engine publication contains detailed information about the Cisco Cache Engine and discusses alternative network configurations.

Reference

http://www.cisco.com/c/en/us/products/14_2/features/wccp/wccp.html#wp2010

Select the best choice.

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Item 17 of 38 (Exam A, Q255)

Show Answer

Calculator

Phase I and Phase II DMVPN differ in terms of which of these characteristics?

- A. Utilization of spoke-to-spoke dynamic tunnels
- B. Utilization of multipoint GRE tunnels at the hub site
- C. Utilization of hub-to-spoke dynamic tunnels
- D. Support for multicast

Select the best choice.

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Hide Answer

Calculator

Item 17 of 38 (Exam A, Q255)

Phase I and Phase II DMVPN differ in terms of which of these characteristics?

- A. Utilization of spoke-to-spoke dynamic tunnels
- B. Utilization of multipoint GRE tunnels at the hub site
- C. Utilization of hub-to-spoke dynamic tunnels
- D. Support for multicast

Answer: A

Section: IP Routing

Explanation: Explanation

DMVPN Phases

Phase 1: Hub and spoke functionality

Phase 2: Spoke-to-spoke functionality

Phase 3: Architecture and scaling

DMVPN Phase 1 Benefits Simplified and Smaller Config's for Hub and Spoke Zero touch provisioning for adding spokes to the VPN Easily supports dynamically addressed CPEs

DMVPN Phase 2 Benefits Future Functionality On-demand spoke-to-spoke tunnels avoids dual encrypts/ decrypts Smaller spoke CPE can participate in the virtual full mesh

Select the best choice.

100%



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Time Remaining: 2:39:47

Item 18 of 38 (Exam A, Q333)

[Show Answer](#)[Calculator](#)

Which three protocols should be explicitly managed by using Control Plane Policing on an Internet border router? (Choose three.)

- A. LDAP
- B. ICMP
- C. RTP
- D. BGP
- E. SSH
- F. RDP

Select all that apply.

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Hide Answer

Calculator

Item 18 of 38 (Exam A, Q333)

Which three protocols should be explicitly managed by using Control Plane Policing on an Internet border router? (Choose three.)

- A. LDAP
- B. ICMP
- C. RTP
- D. BGP
- E. SSH
- F. RDP

Answer: BDE
Section: IP Routing

Select all that apply.

100%



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Time Remaining: 2:38:59

Item 19 of 38 (Exam A, Q379)

[Show Answer](#)[Calculator](#)

In GLBP, which router will answer on client ARP requests?

- A. all active AVF routers as the first response is used by the client
- B. the AVG router, replying with a different AVF MAC address each time
- C. a random AVF router, based on a GLBP seed hash key
- D. only the AVG router that received the ARP request first

Select the best choice.

100%

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Hide Answer

Calculator

Item 19 of 38 (Exam A, Q379)

In GLBP, which router will answer on client ARP requests?

- A. all active AVF routers as the first response is used by the client
- B. the AVG router, replying with a different AVF MAC address each time
- C. a random AVF router, based on a GLBP seed hash key
- D. only the AVG router that received the ARP request first

Answer: B

Section: IP Routing

Select the best choice.

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Calculator

Item 20 of 38 (Exam A, Q290)

Based on the exhibit presented.

What will be the objective of this route map when applied to traffic passing through a router?

```
route-map direct-traffic permit 10
match ip address 100
set next-hop 10.1.1.1
.....
access-list 100 permit ip any host 10.1.14.25
access-list 100 permit ip 10.2.0.0 0.0.255.255 any
```

- A. Take any packet sourced from any address in the 10.2.0.0/16 network or destined to 10.1.14.25 and set the next hop to 10.1.1.1
- B. Take any packet sourced from any address in the 10.2.0.0/16 network and destined to 10.1.14.25 and set the next hop to 10.1.1.1
- C. Nothing; extended access lists are not allowed in route maps used for policy-based routing
- D. Drop any packet sourced from 10.2.0.0/16

Select the best choice.

100%



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Hide Answer

Calculator

Item 20 of 38 (Exam A, Q290)

Based on the exhibit presented.

What will be the objective of this route map when applied to traffic passing through a router?

```
route-map direct-traffic permit 10
match ip address 100
set next-hop 10.1.1.1
.....
access-list 100 permit ip any host 10.1.14.25
access-list 100 permit ip 10.2.0.0 0.0.255.255 any
```

- A. Take any packet sourced from any address in the 10.2.0.0/16 network or destined to 10.1.14.25 and set the next hop to 10.1.1.1
- B. Take any packet sourced from any address in the 10.2.0.0/16 network and destined to 10.1.14.25 and set the next hop to 10.1.1.1
- C. Nothing; extended access lists are not allowed in route maps used for policy-based routing
- D. Drop any packet sourced from 10.2.0.0/16

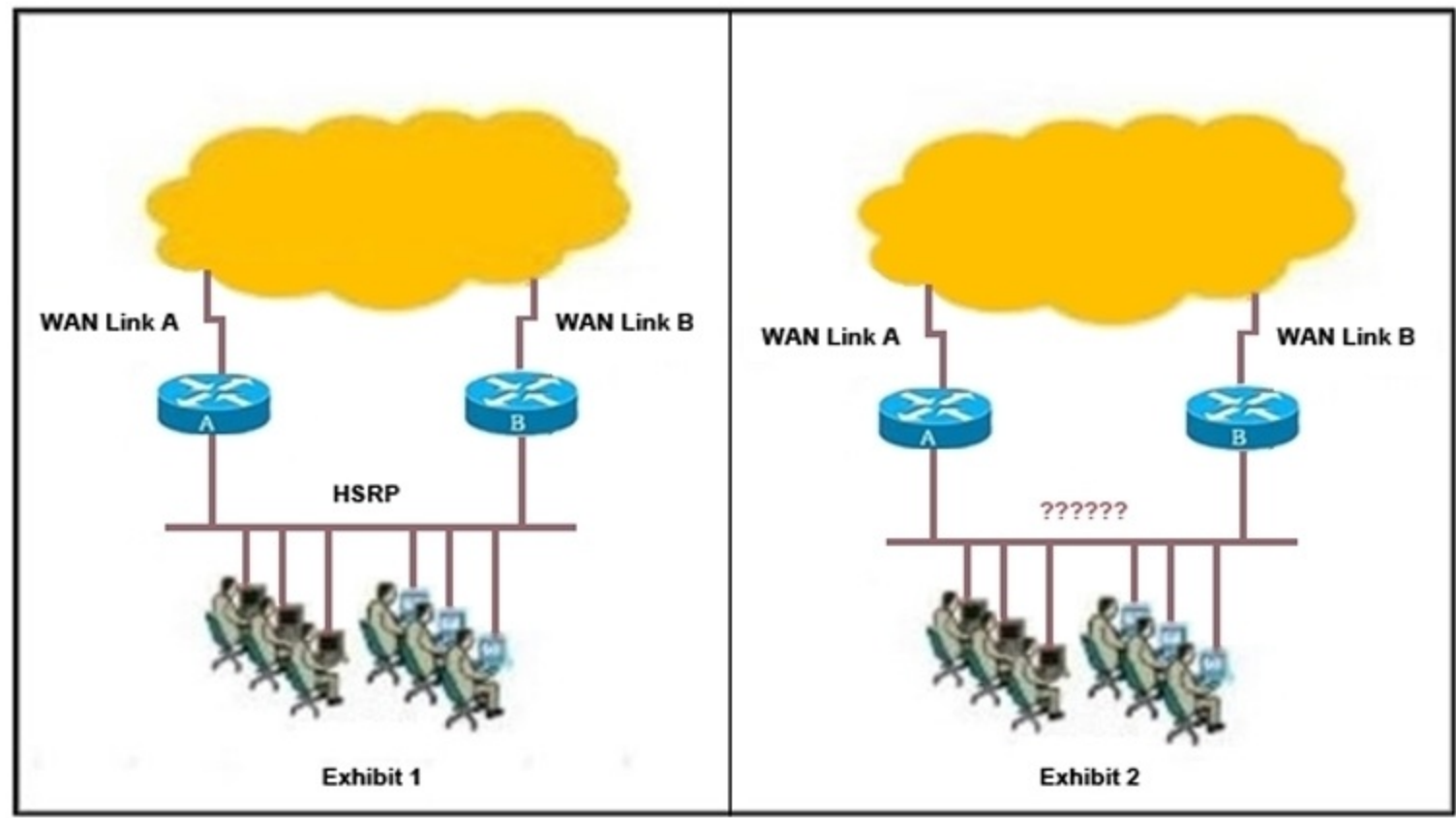
Answer: A
Section: IP Routing

Select the best choice.

100%

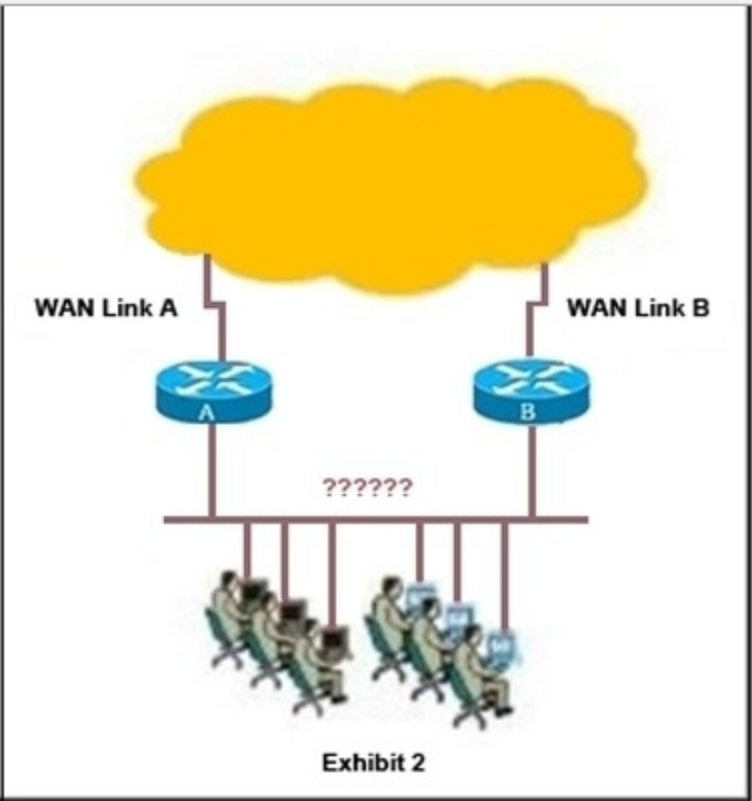
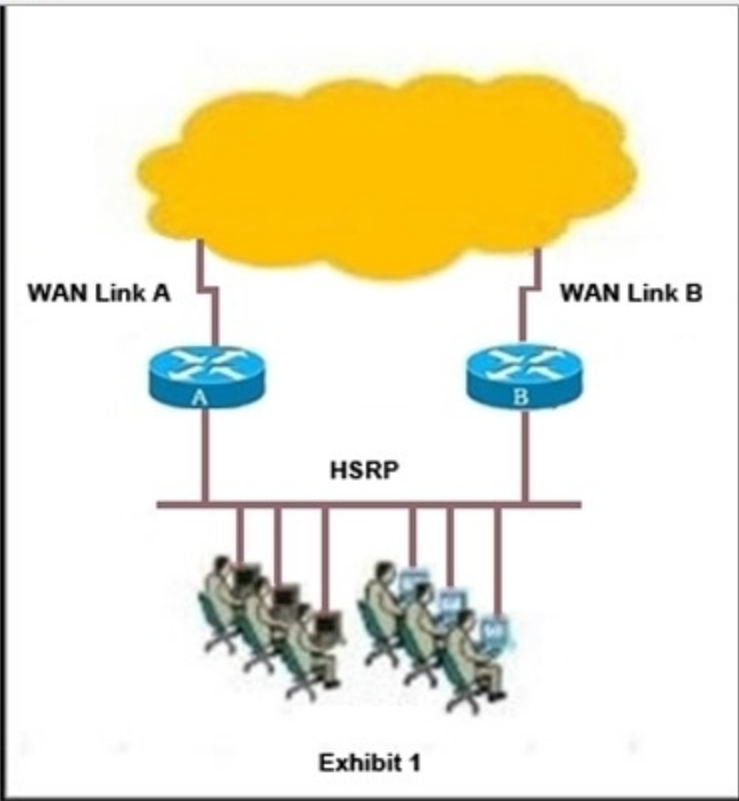
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Refer to exhibits 1 and 2. In exhibit 1, all users on the LAN segment use router A as the active HSRP router. Router B is the standby router for the HSRP. In exhibit 2, the network management team reported that there is no utilization on the WAN link B. To solve this problem, you decide to change the logical topology of your LAN, but you are not sure about what changes must be made. You must manage HSRP or change it to another protocol in order to provide the most scalable design, automatic redundancy, and load balancing. Which one of these actions would be the best choice?



- A. Use MHSRP, with three users using router A as the default gateway and three users using router B as the default gateway.
- B. Keep HSRP and activate PBR to redirect half of the traffic to the other WAN link.
- C. Use the backup interface on the WAN link B to provide load balancing for all users.
- D. Use GLBP instead, because it provides you with up to three MAC addresses for the same default gateway virtual IP address.
- E. Use GLBP instead, because it provides you with up to four MAC addresses for the same default gateway virtual IP address.

Mark



- A. Use MHSRP, with three users using router A as the default gateway and three users using router B as the default gateway.
- B. Keep HSRP and activate PBR to redirect half of the traffic to the other WAN link.
- C. Use the backup interface on the WAN link B to provide load balancing for all users.
- D. Use GLBP instead, because it provides you with up to three MAC addresses for the same default gateway virtual IP address.
- E. Use GLBP instead, because it provides you with up to four MAC addresses for the same default gateway virtual IP address.

Answer: E
Section: IP Routing

Select the best choice.

100%

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Time Remaining: 2:35:20

Item 22 of 38 (Exam A, Q412)

[Show Answer](#)[Calculator](#)

If you have overlapping IP address between two different networks or routing domains, what two commands do you need to globally configure NAT to get this to work?

- A. ip nat outside source list 1 interface x and ip nat inside source list 1 interface x
- B. ip nat outside source static x.x.x.x y.y.y.y and ip nat inside source static x.x.x.x y.y.y.y
- C. ip nat outside source static udp x.x.x.x y.y.y.y and ip nat inside source udp x.x.x.x y.y.y.y
- D. ip nat outside source static tcp x.x.x.x y.y.y.y and ip nat outside source tcp x.x.x.x y.y.y.y

Select the best choice.

100%

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Hide Answer

Calculator

Item 22 of 38 (Exam A, Q412)

If you have overlapping IP address between two different networks or routing domains, what two commands do you need to globally configure NAT to get this to work?

- A. `ip nat outside source list 1 interface x` and `ip nat inside source list 1 interface x`
- B. `ip nat outside source static x.x.x.x y.y.y.y` and `ip nat inside source static x.x.x.x y.y.y.y`
- C. `ip nat outside source static udp x.x.x.x y.y.y.y` and `ip nat inside source udp x.x.x.x y.y.y.y`
- D. `ip nat outside source static tcp x.x.x.x y.y.y.y` and `ip nat outside source tcp x.x.x.x y.y.y.y`

Answer: B

Section: IP Routing

Select the best choice.

100%



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Time Remaining: 2:35:05

Item 23 of 38 (Exam A, Q152)

[Show Answer](#)[Calculator](#)

Which of these statements best describes the major difference between an IPv4-compatible tunnel and a 6to4 tunnel?

- A. An IPv4-compatible tunnel is a static tunnel, but a 6to4 tunnel is a semiautomatic tunnel.
- B. The deployment of a IPv4-compatible tunnel requires a special code on the edge routers, but a 6to4 tunnel does not require any special code.
- C. An IPv4-compatible tunnel is typically used only between two IPv6 domains, but a 6to4 tunnel is used to connect two or more IPv6 domains.
- D. For an IPv4-compatible tunnel, the ISP assigns only IPv4 addresses for each domain, but for a 6to4 tunnel, the ISP assigns only IPv6 addresses for each domain.

Select the best choice.

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Hide Answer

Calculator

Item 23 of 38 (Exam A, Q152)

Which of these statements best describes the major difference between an IPv4-compatible tunnel and a 6to4 tunnel?

- A. An IPv4-compatible tunnel is a static tunnel, but an 6to4 tunnel is a semiautomatic tunnel.
- B. The deployment of a IPv4-compatible tunnel requires a special code on the edge routers, but a 6to4 tunnel does not require any special code.
- C. An IPv4-compatible tunnel is typically used only between two IPv6 domains, but a 6to4 tunnel is used to connect two or more IPv6 domains.
- D. For an IPv4-compatible tunnel, the ISP assigns only IPv4 addresses for each domain, but for a 6to4 tunnel, the ISP assigns only IPv6 addresses for each domain.

Answer: C

Section: IP Routing

Select the best choice.

100%



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Show Answer

Calculator

Item 24 of 38 (Exam A, Q441)

Refer to the exhibit.

If the router that produced the output in the exhibit fails, which virtual IP address will become active when the router recovers?

```
Router#show standby brief
                P indicates configured to preempt.
                |
Interface      Grp  Pri  P State   Active        Standby        Virtual IP
Et0/0          25  150      Active local        10.1.1.101     10.1.1.1
Et0/0          100 100 P Active local        10.1.1.101     10.1.1.2
```

- A. 10.1.1.1
- B. 10.1.1.2
- C. 10.1.1.101
- D. All groups

Select the best choice.

100%



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Mark[Hide Answer](#) [Calculator](#)

Item 24 of 38 (Exam A, Q441)

Refer to the exhibit.
If the router that produced the output in the exhibit fails, which virtual IP address will become active when the router recovers?

```
Router#show standby brief
                P indicates configured to preempt.
                |
Interface      Grp  Pri  P State   Active      Standby      Virtual IP
Et0/0          25  150  Active local    10.1.1.101   10.1.1.1
Et0/0          100 100 P Active local    10.1.1.101   10.1.1.2
```

- A. 10.1.1.1
- B. 10.1.1.2
- C. 10.1.1.101
- D. All groups

Answer: A
Section: IP Routing

Select the best choice.

100%

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Item 25 of 38 (Exam A, Q306)

[Show Answer](#)[Calculator](#)

Which two tunneling techniques in IPv6 do not require an IPv4 tunnel destination in the configuration? (Choose two.)

- A. 6to4
- B. 6over4
- C. ISATAP
- D. GRE

Select all that apply.

100%

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Time Remaining: 2:34:09

Item 25 of 38 (Exam A, Q306)

[Hide Answer](#)[Calculator](#)

Which two tunneling techniques in IPv6 do not require an IPv4 tunnel destination in the configuration? (Choose two.)

- A. 6to4
- B. 6over4
- C. ISATAP
- D. GRE

Answer: AC

Section: IP Routing

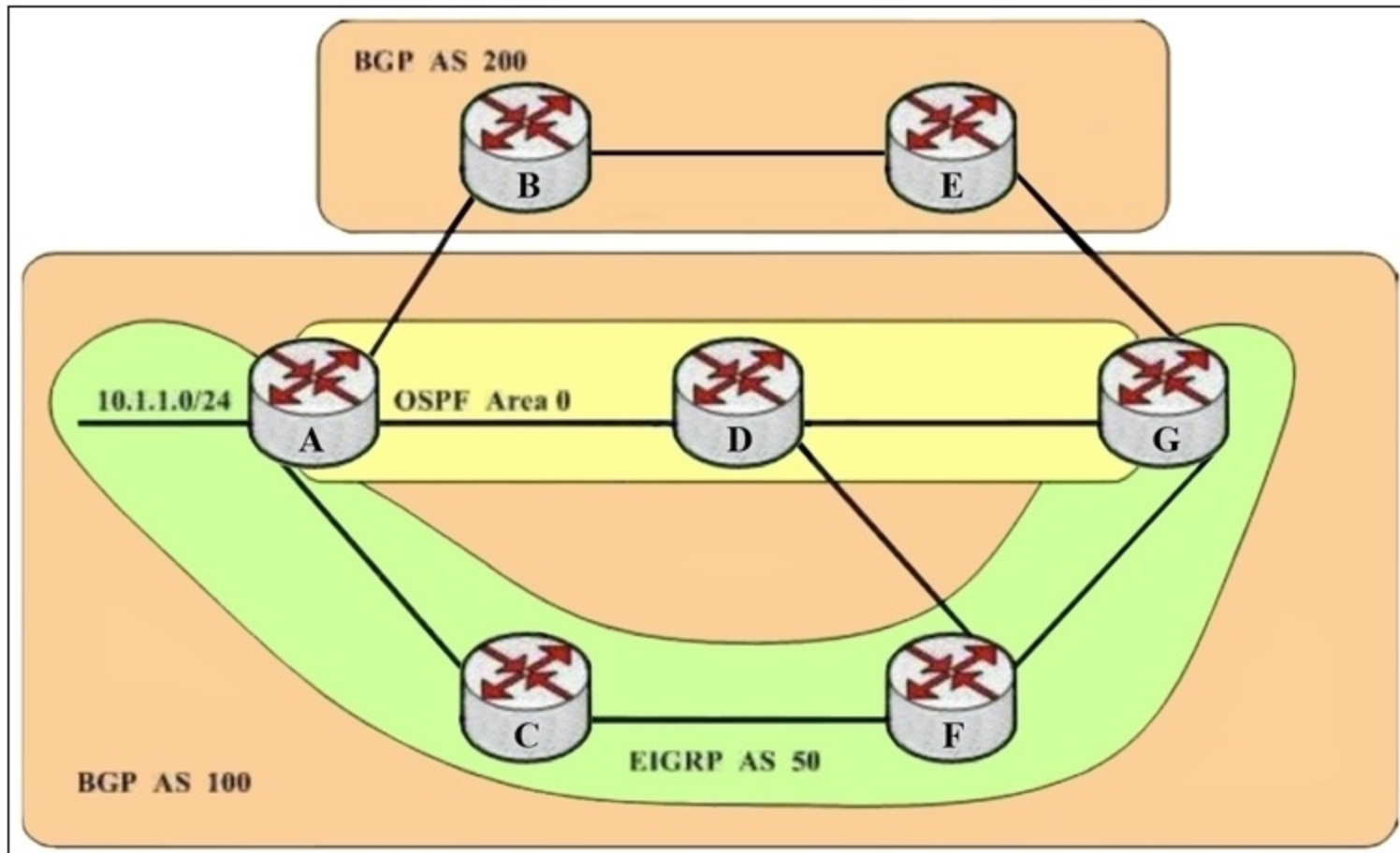
Select all that apply.

100%

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In this network, if all required configurations are true for routing. Subnet 10.1.1.0/24 is sourced by Router-A and advertised via BGP, OSPF, and EIGRP. Finally, Router-G knows this subnet. Which routing protocol and administrative distance can be used by Router-G to reach subnet 10.1.1.0/24?



- A. EIGRP, AD 90
- B. EIGRP, AD 170
- C. OSPF, AD 110
- D. BGP, AD 20

Select the best choice.

100%

Mark

- A. EIGRP, AD 90
- B. EIGRP, AD 170
- C. OSPF, AD 110
- D. BGP, AD 20

Answer: A
 Section: IP Routing

Administrative distance is the feature that routers use in order to select the best path when there are two or more different routes to the same destination from two different routing protocols. Administrative distance defines the reliability of a routing protocol. Each routing protocol is prioritized in order of most to least reliable (believable) with the help of an administrative distance value.

Route Source	Default Distance Values
Connected interface	0
Static route	1
Enhanced Interior Gateway Routing Protocol (EIGRP) summary route	5
External Border Gateway Protocol (BGP)	20
Internal EIGRP	90
IGRP	100
OSPF	110
Intermediate System-to-Intermediate System (IS-IS)	115
Routing Information Protocol (RIP)	120
Exterior Gateway Protocol (EGP)	140
On Demand Routing (ODR)	160
External EIGRP	170
Internal BGP	200
Unknown*	255

Reference
[https://www.cisco.com/c/en-us/networking/whitepapers/whitepaper-00196-000001495.html](#)

Select the best choice.

100%

Mark

Time Remaining: 2:32:27

Item 27 of 38 (Exam A, Q446)

Show Answer

Calculator

Which protocol should be used in order to configure first hop redundancy between a Cisco router and a router from another company?

- A. HSRP
- B. VRRP
- C. GLBP
- D. IRDP

Select the best choice.

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Time Remaining: 2:32:17

Item 27 of 38 (Exam A, Q446)

Hide Answer

Calculator

Which protocol should be used in order to configure first hop redundancy between a Cisco router and a router from another company?

- A. HSRP
- B. VRRP
- C. GLBP
- D. IRDP

Answer: B

Section: IP Routing

Select the best choice.

100% 

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Time Remaining: 2:32:07

Item 28 of 38 (Exam A, Q150)

[Show Answer](#)[Calculator](#)

Which two of these parameters are used to determine a forwarding equivalence class? (Choose two.)

- A. IP prefix
- B. Layer 2 circuit
- C. RSVP request from CE for bandwidth reservation
- D. BGP MED value

Select all that apply.

100%

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Time Remaining: 2:32:00

Item 28 of 38 (Exam A, Q150)

[Hide Answer](#)[Calculator](#)

Which two of these parameters are used to determine a forwarding equivalence class? (Choose two.)

- A. IP prefix
- B. Layer 2 circuit
- C. RSVP request from CE for bandwidth reservation
- D. BGP MED value

Answer: AB

Section: IP Routing

Select all that apply.

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Show Answer

Calculator

Item 29 of 38 (Exam A, Q190)

Half of your network uses RIPv2 and the other half runs OSPF. The networks do not communicate with each other. Which two of these factors describe the impact of activating EIGRP over each separate part? (Choose two.)

- A. EIGRP will not be accepted when configured on the actual RIPv2 routers.
- B. OSPF will no longer be used in the routing table, because you only have EIGRP internal routes running.
- C. OSPF will no longer be used in the routing table, because you only have EIGRP external routes running.
- D. RIPv2 will populate its RIP database but not its routing table, because you only have EIGRP external routes running.
- E. RIPv2 will populate its RIP database but not its routing table, because you only have EIGRP internal routes running.
- F. OSPF database will have RIPv2 routes.

Select all that apply.

100%



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Hide Answer

Calculator

Item 29 of 38 (Exam A, Q190)

Half of your network uses RIPv2 and the other half runs OSPF. The networks do not communicate with each other. Which two of these factors describe the impact of activating EIGRP over each separate part? (Choose two.)

- A. EIGRP will not be accepted when configured on the actual RIPv2 routers.
- B. OSPF will no longer be used in the routing table, because you only have EIGRP internal routes running.
- C. OSPF will no longer be used in the routing table, because you only have EIGRP external routes running.
- D. RIPv2 will populate its RIP database but not its routing table, because you only have EIGRP external routes running.
- E. RIPv2 will populate its RIP database but not its routing table, because you only have EIGRP internal routes running.
- F. OSPF database will have RIPv2 routes.

Answer: BE

Section: IP Routing

Select all that apply.

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