

Cisco

Exam Questions 300-101

Implementing Cisco IP Routing



NEW QUESTION 1

Which task must you perform to enable a point-to-point Frame Relay connection?

- A. Enable inverse ARP.
- B. Configure the encapsulation type.
- C. Configure static address mapping.
- D. Disable inverse ARP.

Answer: C

NEW QUESTION 2

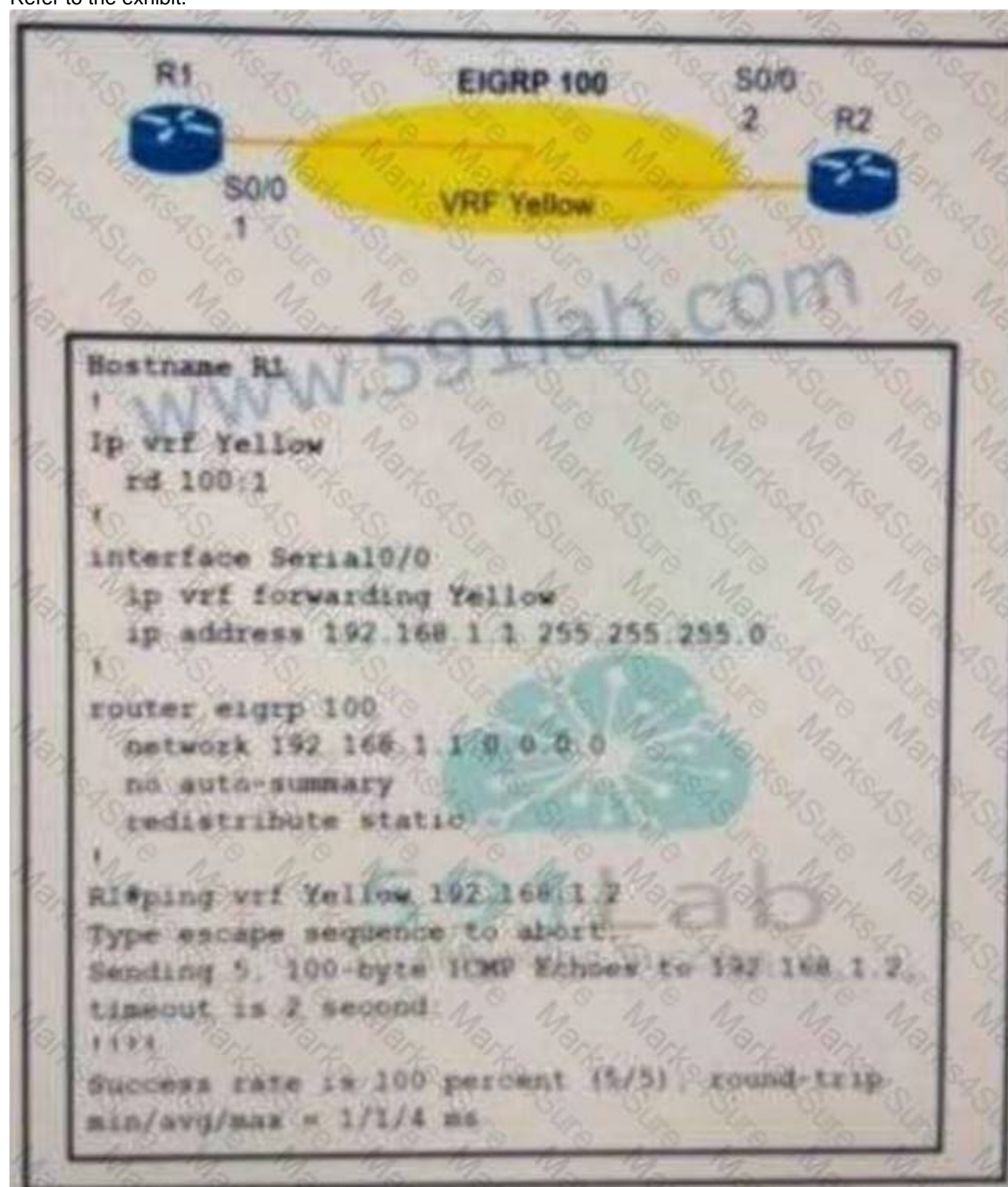
Which condition prevents the establishment of a DMVPN tunnel between two spokes?

- A. The two spokes have different tunnel keepalive settings
- B. HSRP is enabled on the spoke devices
- C. IPsec is enabled on the spoke devices
- D. The two spokes are behind different PAT devices

Answer: A

NEW QUESTION 3

Refer to the exhibit.



R1 is configured with VRF-Lite and can ping R2. R2 is fully configured, but it has no active EIGRP neighbors in vrf Yellow. If the configuration of R2 is complete, then which issue prevents the EIGRP 100 neighbor relationship in vrf Yellow from forming?

- A. The no auto-summary command is preventing the EIGRP neighbor relationship from forming
- B. There is a Layer 1 issue that prevents the EIGRP neighbor relationship from forming
- C. The interface IP addresses are not in the same subnet
- D. EIGRP 100 network 192 168 1 0/24 is configured in the global routing table on R1

Answer: D

NEW QUESTION 4

Where can NetFlow export data for long term storage and analysis?

- A. another network device
- B. syslog
- C. flat file
- D. collector

Answer: D

NEW QUESTION 5

Which two types of threshold are configured for tracking object? (Choose two)

- A. delay
- B. percentage
- C. bandwidth
- D. administrative distance
- E. weight

Answer: BE

NEW QUESTION 6

In which state do DR and BDR establish adjacency with each ospf router in the network

- A. Exstart State
- B. Loading State
- C. Exchange State
- D. Init State

Answer: A

NEW QUESTION 7

Which two statements are true of the OSPF link-state routing protocol? (Choose two.)

- A. Using the Bellman-Ford algorithm, each OSPF router independently calculates its best paths to all destinations in the network.
- B. Using the DUAL algorithm, each OSPF router independently calculates its best paths to all destinations in the network.
- C. OSPF sends summaries of individual link-state entries every 30 minutes to ensure LSDB synchronization.
- D. OSPF sends triggered updates when a network change occurs
- E. OSPF sends updates every 10 seconds
- F. When a link changes state, the router that detected the change creates a link-state advertisement (LSA) and propagates it to all OSPF devices using the 224.0.0.6 multicast address.

Answer: CD

NEW QUESTION 8

which phase of dmpvn spoke to spoke communications?

- A. phase2
- B. phase4C
- C. phase5
- D. phase6
- E. phase1

Answer: A

NEW QUESTION 9

What is the minimum privilege level to allow a user to execute all user-level commands but prohibits enable level commands by default?

- A. level 0
- B. level 1
- C. level 14
- D. level 15
- E. level 16

Answer: B

NEW QUESTION 10

Refer to the exhibit.

```
access-list 1 permit 192.168.1.1
access-list 1 deny any
!
access-list 2 permit 192.168.1.4
access-list 2 deny any
!
ntp access-group serve 1
ntp master 4
ntp access-group peer 2
```

Which three NTP features can be deduced on the router (Choose three.)

- A. only accepts time requests from 192.168.1.1
- B. only handle four requests at a time
- C. only is in stratum 4
- D. only updates its time from 192.168.1.1
- E. only accepts time requests from 192.168.1.4
- F. only updates its time from 192.168.1.4

Answer: ACF

NEW QUESTION 10

What is the hop count that is advertised for an unreachable network by a RIP routes that uses poison reverse?

- A. 15
- B. 16
- C. 255

Answer: C

NEW QUESTION 14

With which network type will OSPF establish router adjacencies but not perform the DR/BDR election

- A. Point-to-point
- B. Backbone area 0
- C. Broadcast multi-access
- D. Non-broadcast multi-access

Answer: A

NEW QUESTION 16

In which scenario can asymmetric routing occur?

- A. active/standby firewall setup
- B. active/active firewall setup
- C. redundant routers running VRRP
- D. single path in and out of the network

Answer: B

NEW QUESTION 18

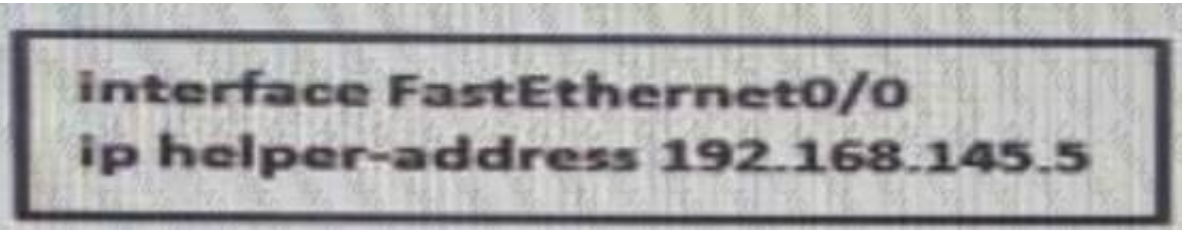
What is supported radius server? (choose two)

- A. telnet
- B. authentication
- C. accounting
- D. authorization
- E. SSH

Answer: BD

NEW QUESTION 19

Refer to exhibit.



```
interface FastEthernet0/0
ip helper-address 192.168.145.5
```

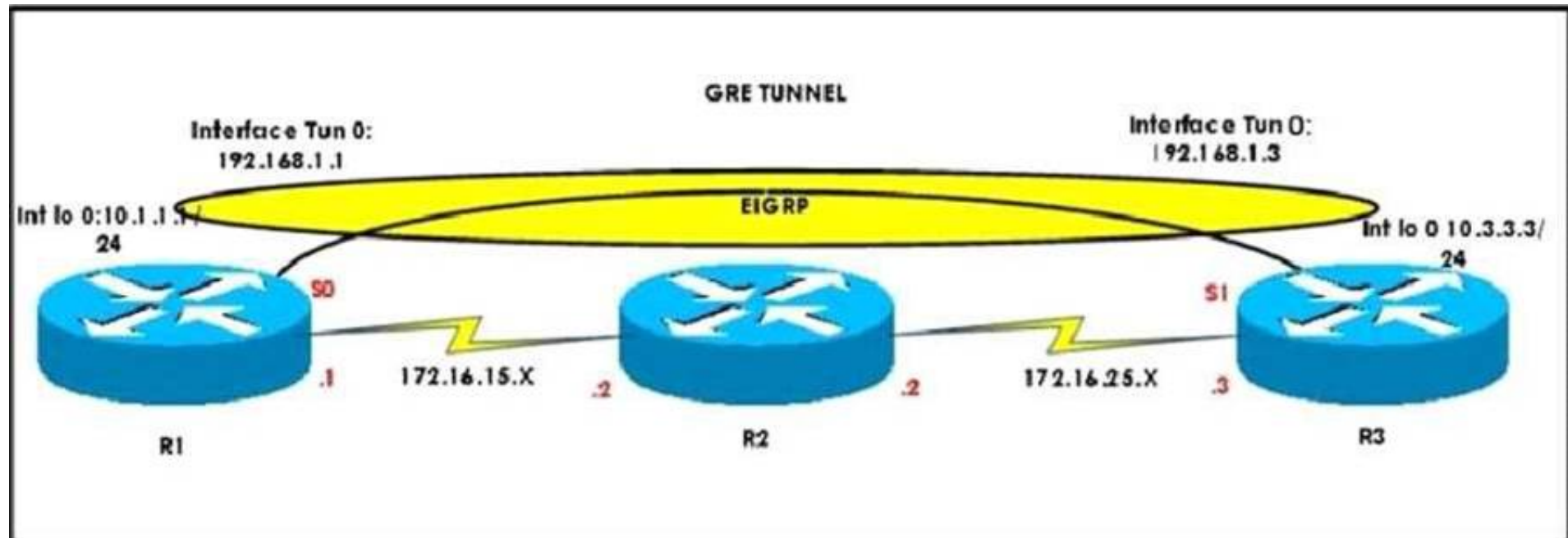

A packet capture indicates that router is not forwarding the DHCP packets that it receives on interface FastEthernet command must be entered in global configuration mode to resolve this issue?

- A. ip forward-protocol
- B. ip DHCP relay
- C. ip helper
- D. service DHCP

Answer: A

NEW QUESTION 21

Refer to the exhibit.



After configuring GRE between two routers running EIGRP that are connected to each other via a WAN link, a network engineer notices that the two routers cannot establish the GRE tunnel to begin the exchange of routing updates. What is the reason for this?

- A. Either a firewall between the two routers or an ACL on the router is blocking TCP 47.
- B. Either a firewall between the two routers or an ACL on the router is blocking IP protocol
- C. Either a firewall between the two routers or an ACL on the router is blocking UDP 57
- D. Either a firewall between the two routers or an ACL on the router is blocking IP protocol number 47

Answer: B

NEW QUESTION 23

Which criterion does BGP evaluate first when determining the best path?

- A. MED value
- B. neighbor address
- C. local preference value
- D. weight

Answer: D

Explanation: <https://www.cisco.com/c/en/us/support/docs/ip/border-gateway-protocol-bgp/13753-25.html>
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How the Best Path Algorithm Works

BGP assigns the first valid path as the current best path. BGP then compares the best path with the next path in the list, until BGP reaches the end of the list of valid paths. This list provides the rules that are used to determine the best path:

1. Prefer the path with the highest WEIGHT.

Note: WEIGHT is a Cisco-specific parameter. It is local to the router on which it is configured.

2. Prefer the path with the highest LOCAL_PREF.

Note: A path without LOCAL_PREF is considered to have had the value set with the `bgp default local-preference` command, or to have a value of 100 by default.

NEW QUESTION 27

Which two BGP neighbor states are valid? (Choose two)

- A. DROTHER
- B. established
- C. stuck in active
- D. unknown
- E. 2-WAY
- F. active

Answer: BF

NEW QUESTION 32

How is authentication handled with OSPFv3?

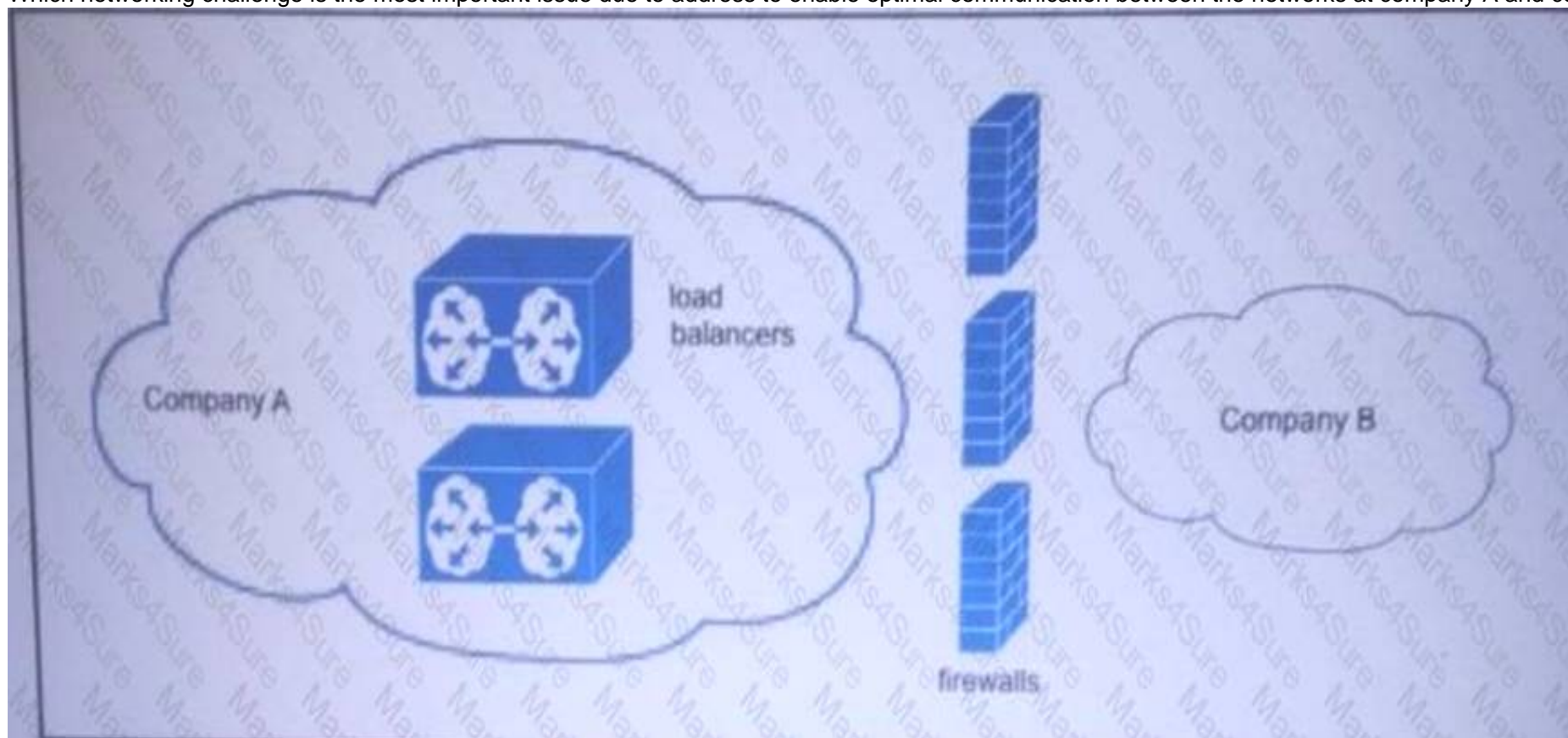
- A. OSPFv3 for IPv6 authentication is supported by SHA-1 authentication.
- B. OSPFv3 for IPv6 authentication is supported by MD5 authentication
- C. OSPFv3 for IPv6 authentication is supported by IPv6 IPsec
- D. OSPFv3 for IPv6 authentication is supported by IPv4 IPsec

Answer: C

NEW QUESTION 34

Refer to the exhibit.

Which networking challenge is the most important issue due to address to enable optimal communication between the networks at company A and company B?



- A. unicast flooding
- B. IPv4 MTU
- C. asymmetric
- D. routing IPv4 fragmentation
- E. UDP latency

Answer: C

NEW QUESTION 39

Refer to the exhibit. Which command is used to control the type of routes that are processed in incoming route updates?

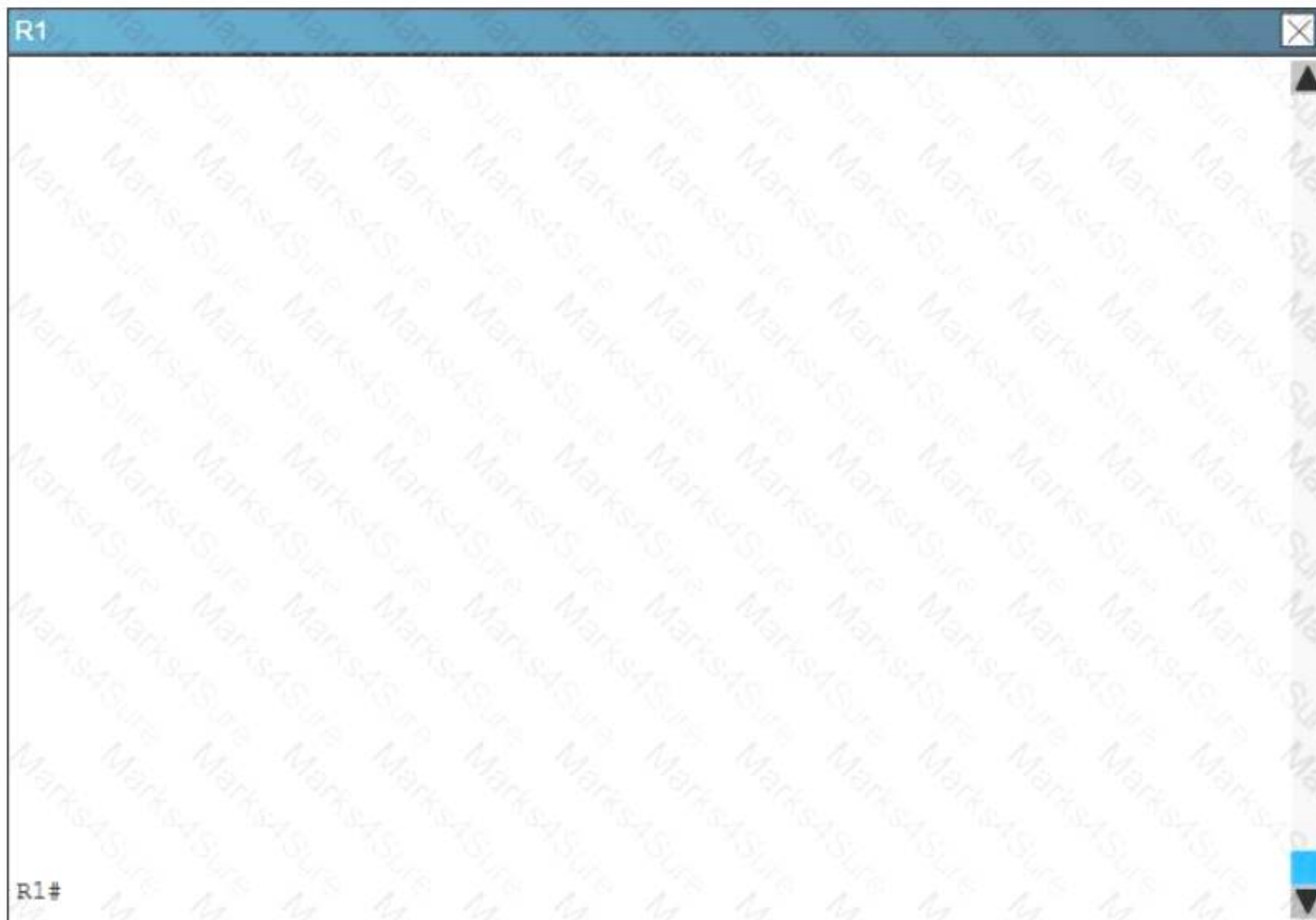
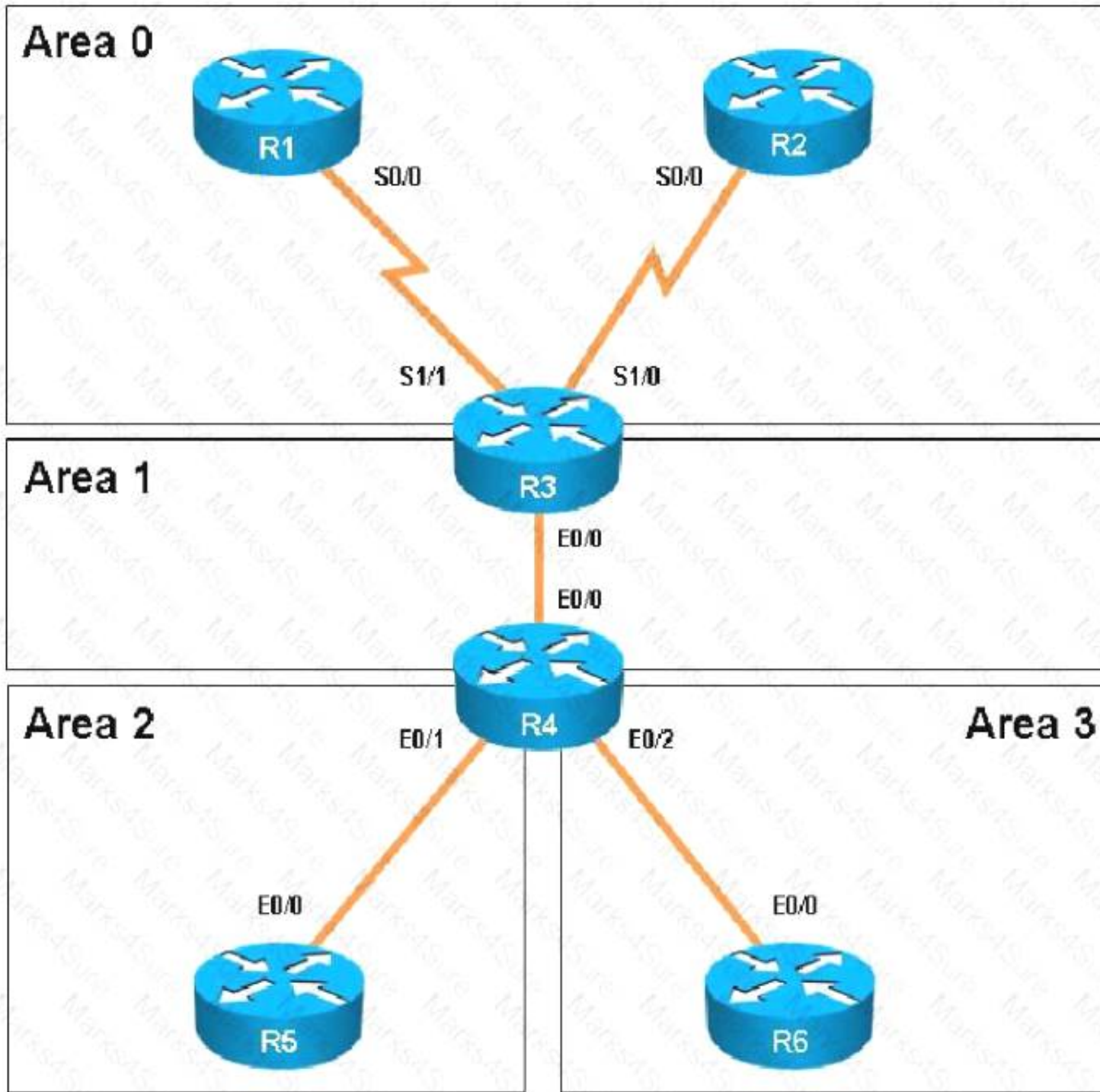
- A. passive-interface
- B. distribute-list 1 out
- C. distribute-list 1 in
- D. ip vrf forwarding

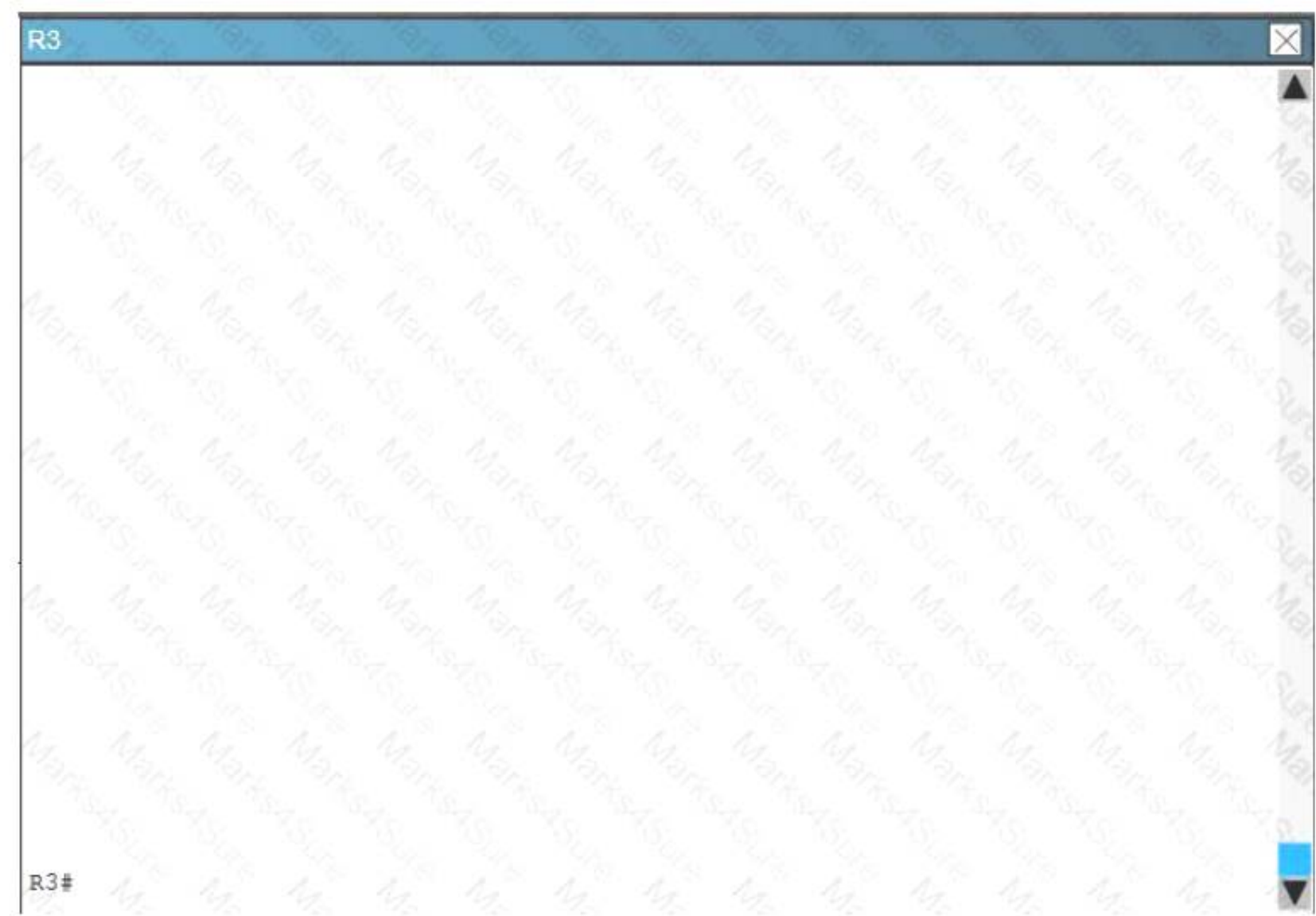
Answer: C

NEW QUESTION 42

Scenario:

You have been asked to evaluate an OSPF network setup in a test lab and to answer questions a customer has about its operation. The customer has disabled your access to the show running-config command.





R4

R4#

R5

R5#



Areas of Router 5 and 6 are not normal areas, inspect their routing tables and determine which statement is true?

- A. R5's Loopback and R6's Loopback are both present in R5's Routing table
- B. R5's Loopback and R6's Loopback are both present in R6's Routing table
- C. Only R5's loopback is present in R5's Routing table
- D. Only R6's loopback is present in R5's Routing table
- E. Only R5's loopback is present in R6's Routing table

Answer: A

NEW QUESTION 46

Drag and drop the statement about device security from the left on the correct features on the right.

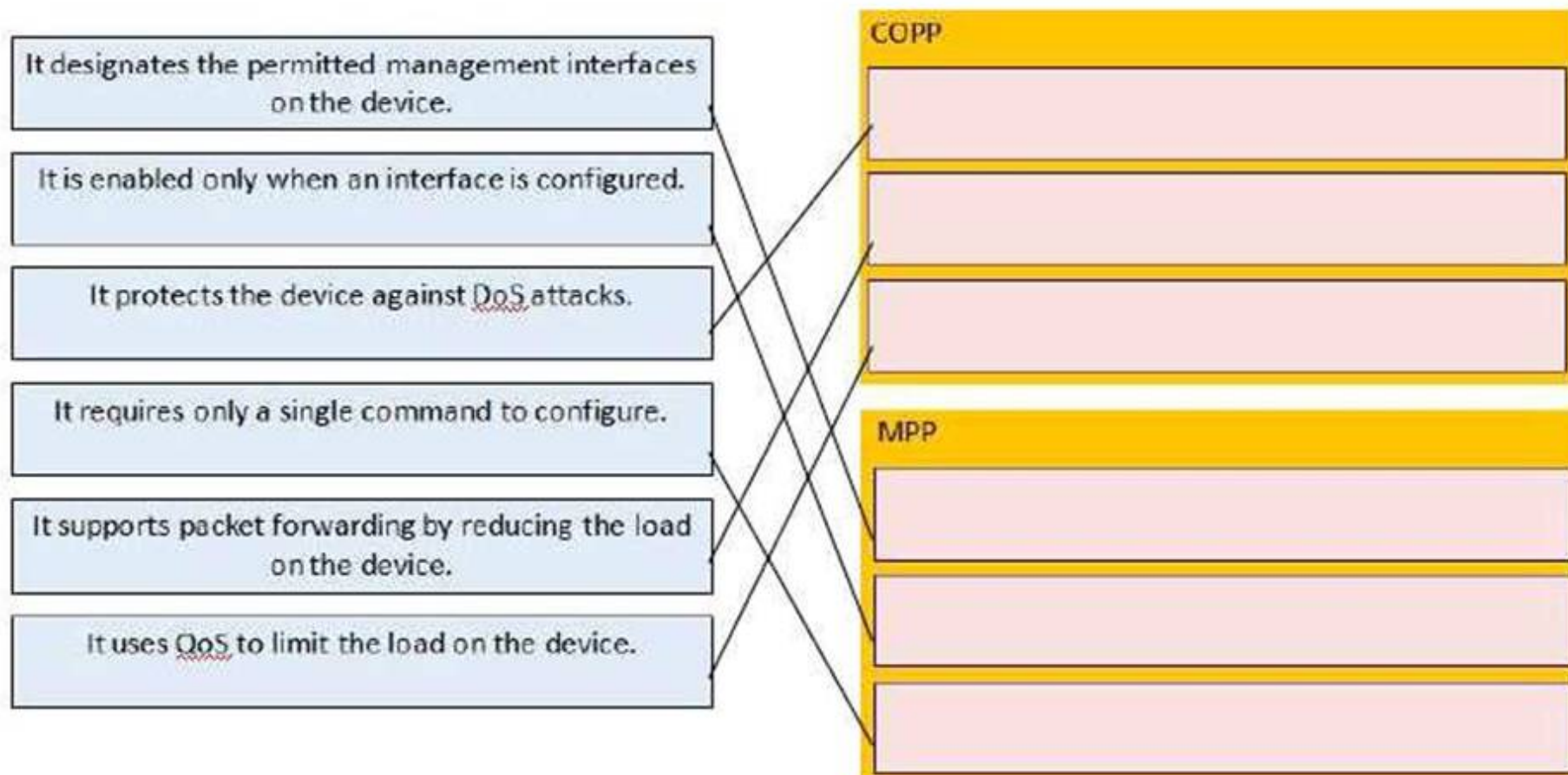
- It designates the permitted management interfaces on the device.
- It is enabled only when an interface is configured.
- It protects the device against DoS attacks.
- It requires only a single command to configure.
- It supports packet forwarding by reducing the load on the device.
- It uses QoS to limit the load on the device.

COPP

MPP

Answer:

Explanation:



NEW QUESTION 50

Refer to the following.

```
aaa new-model
```

```
aaa authentication login default local-case enable aaa authentication login ADMIN local-case username CCNP secret Str0ngP@ssw0rd!
```

```
line 0 4
```

```
login authentication ADMIN
```

How can you change this configuration so that when user CCNP logs in, the show run command is executed and the session is terminated?

- A. Add the autocommand keyword to the aaa authentication command
- B. Assign privilege level 15 to the CCNP username
- C. Add the access-class keyword to the aaa authentication command
- D. Assign privilege level 14 to the CCNP username
- E. Add the access-class keyword to the username command
- F. Add the autocommand keyword to the username command

Answer: F

NEW QUESTION 53

Refer to the exhibit.


```
ip vrf BLUE
ip vrf RED
!
interface FastEthernet0/0
ip vrf forwarding RED
ip address 10.1.1.1
255.255.255.0
!
interface FastEthernet0/1
ip vrf forwarding BLUE
ip address 10.1.2.1
255.255.255.0
```

Network users on the 10.1.2.0/24 subnet have a default gateway of 10.1.2.254. Which command will configure this gateway?

- A. router(config)#ip route vrf RED 0 0.0 0 0 0.0.0 10.1.2.254
- B. router(config)#ip route 0.0.0.0 0.0.0.0 10.1.2.254
- C. router(config)#ip route 0.0.0 0 0.0.0.0 fastethernet0/1
- D. router(config)#ip route vrf BLUE 0.0.0.0 0.0.0.0 10.1.2.254

Answer: D

NEW QUESTION 54

A network engineer has configured an IOS router to synchronize its clock with a Windows server. After several minutes, the network engineer notices that the local time on the router does not match the time on the windows server. What is the reason for this?

- A. Either a firewall between the drives or an ACL on the router is blocking TCP port 958.
- B. Either a firewall between the two devices or an ACL on the router is blocking TCP port 123.
- C. Either a firewall between the two devices or an ACL on the router is blocking UDP port 123.
- D. Either a firewall between the two devices or an ACL on the router is blocking UDP port 858.

Answer: C

NEW QUESTION 58

Which configuration parameter is invalid when configuration unicast reverse path forwarding?

- A. source reachable via both
- B. allow self to router
- C. allow based on ACL match
- D. allow default route

Answer: A

NEW QUESTION 59

Refer to the exhibit.

```
router eigrp 1
 redistribute bgp 1 route-map BGP_DEFAULT_ROUTE_RM
 network 2.0.0.0
 route-map BGP_DEFAULT_ROUTE_RM PERMIT 10
 match ip address prefix-list DEFAULT_ROUTE_PL
 ip prefix-list DEFAULT_ROUTE_PL seq 10 permit 0.0.0.0/0
```

For which reason is EIGRP failing to redistribute the default route?

- A. The EIGRP process is missing the default metric.
- B. The EIGRP process is missing the no auto-summary command.

- C. The EIGRP process is missing the router ID.
D. The route-map statement is missing the match any keyword.

Answer: A

NEW QUESTION 61

have been asked to complete the implementation to allow this ping.

ROUTE.com's corporate implementation guidelines require:

- The OSPF process ID for all routers must be 85.
- The routing protocol for each interface must be enabled under the routing process.
- The routing protocol must be enabled for each interface using the most specific wildcard mask possible.
- The serial link between Seattle and StLouis must be in OSPF area 33.
- OSPF area 33 must not receive any inter-area or external routes.

Name	Interface	IP Address	Secret Password
Seattle	S0/0	192.168.39.5/30	cisco
	S0/1	192.168.39.6/30	
StLouis	S0/0	192.168.75.9/30	cisco
	S0/1	192.168.75.10/30	
Atlanta	Loopback0	172.16.241.24	

• You may need to scroll this window and the problem statement window.

• Click on picture of host connected to the specified router and select the CiscoTerminal option to configure.

Answer:

Explanation: Below is detail answer given C:\Users\wk\Desktop\mudassar\Untitled.jpg

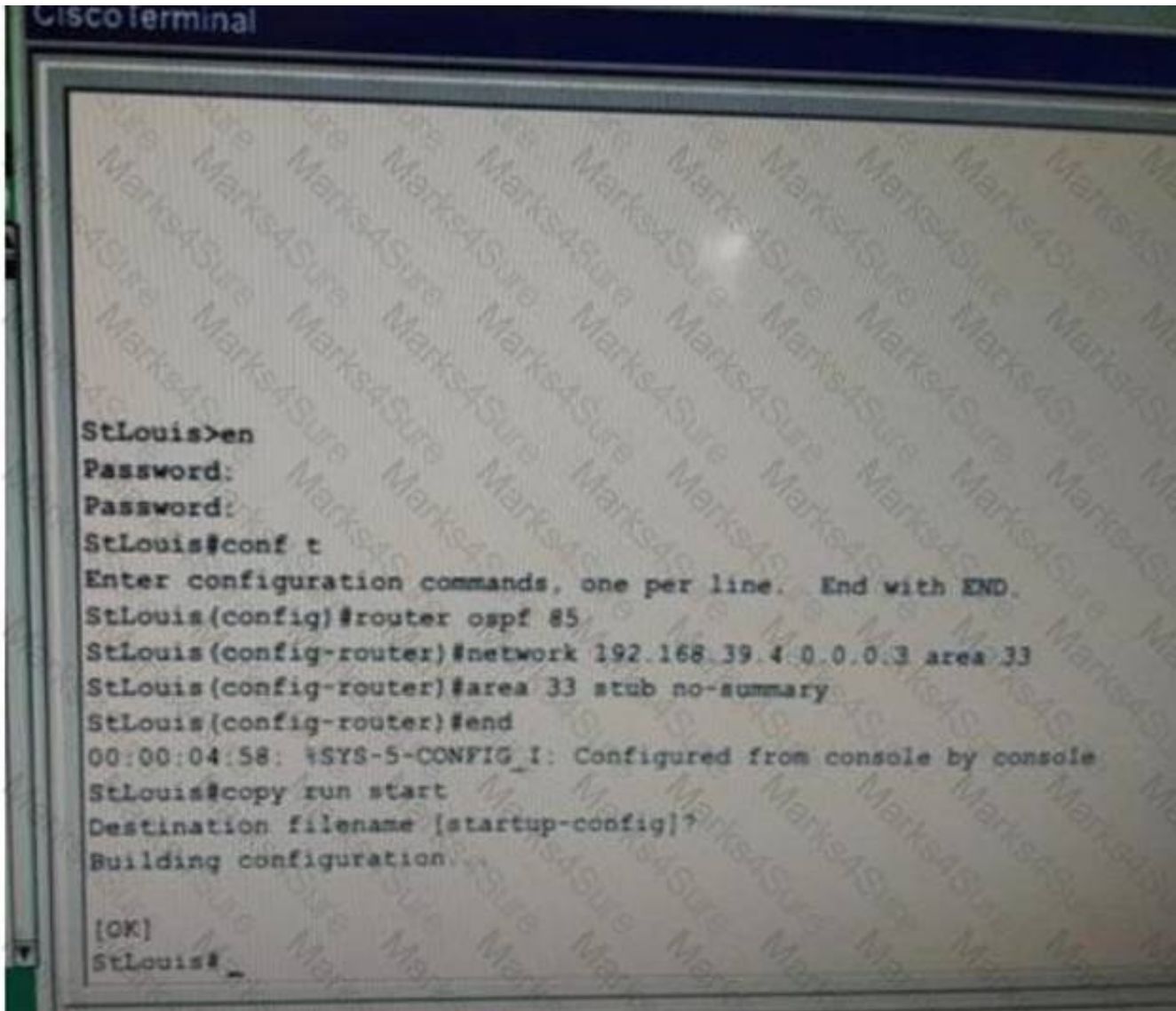
```

CiscoTerminal

Seattle>en
Password:
Password:
Seattle#conf t
Enter configuration commands, one per line. End with END.
Seattle(config)#router ospf 85
Seattle(config-router)#network 192.168.39.4 0.0.0.3 area 33
Seattle(config-router)#area 33 stub
Seattle(config-router)#end
00:00:02.45: %SYS-5-CONFIG I: Configured from console by console
Seattle#copy run start
Destination filename [startup-config]?
Building configuration.

[OK]
Seattle#
    
```

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NEW QUESTION 63

A network engineer enables OSPF on a Frame Relay WAN connection to various remote sites, but no OSPF adjacencies come up. Which two actions are possible solutions for this issue? (Choose Two)

- A. Change the network type to point-to-multipoint under WAN interface.
- B. Enable virtual links.
- C. Change the network type to nonbroadcast multipoint access.
- D. Configure the neighbor command under OSPF process for each remote site.
- E. Ensure that the OSPF process number matches among all remote sites

Answer: AD

NEW QUESTION 68

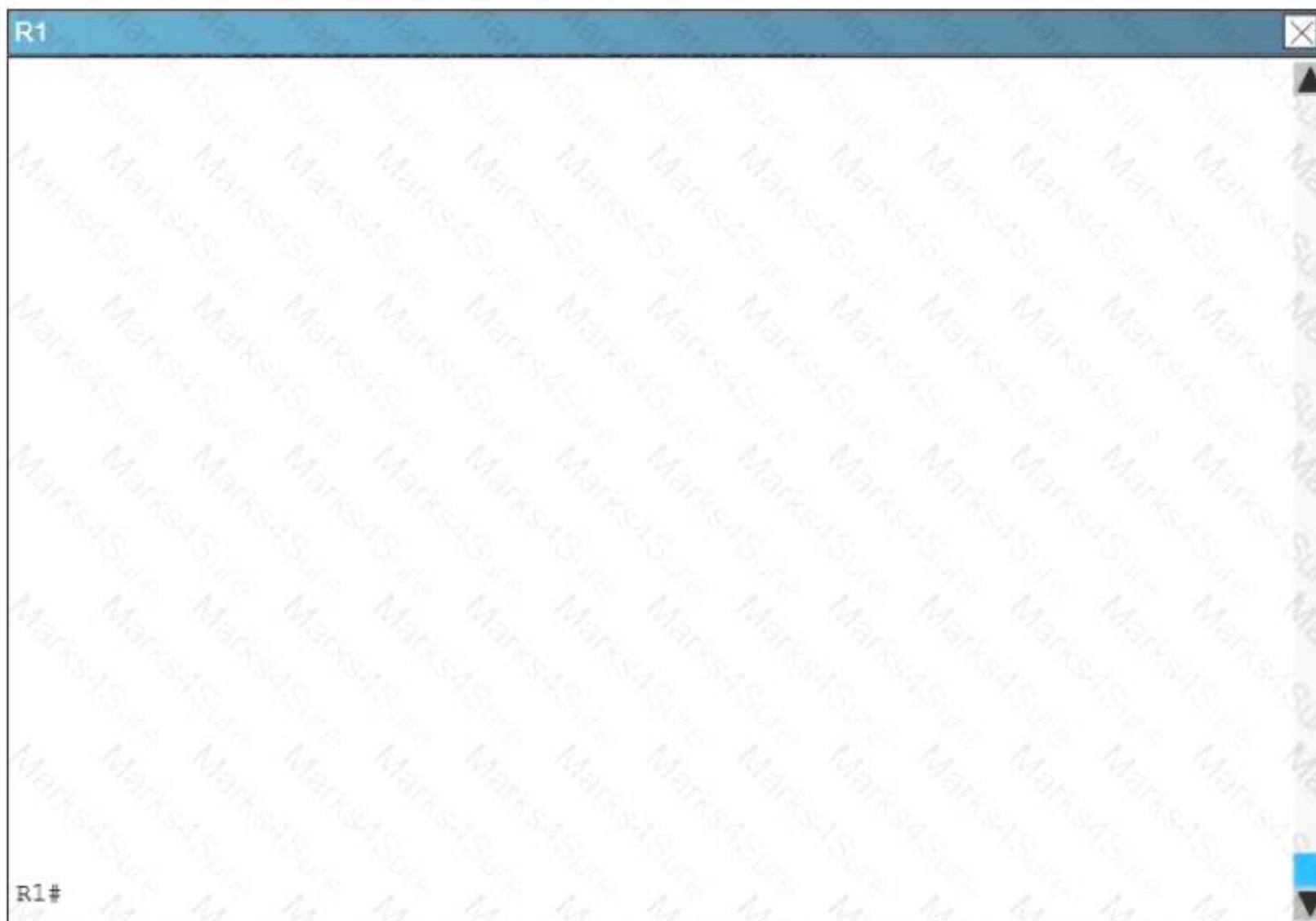
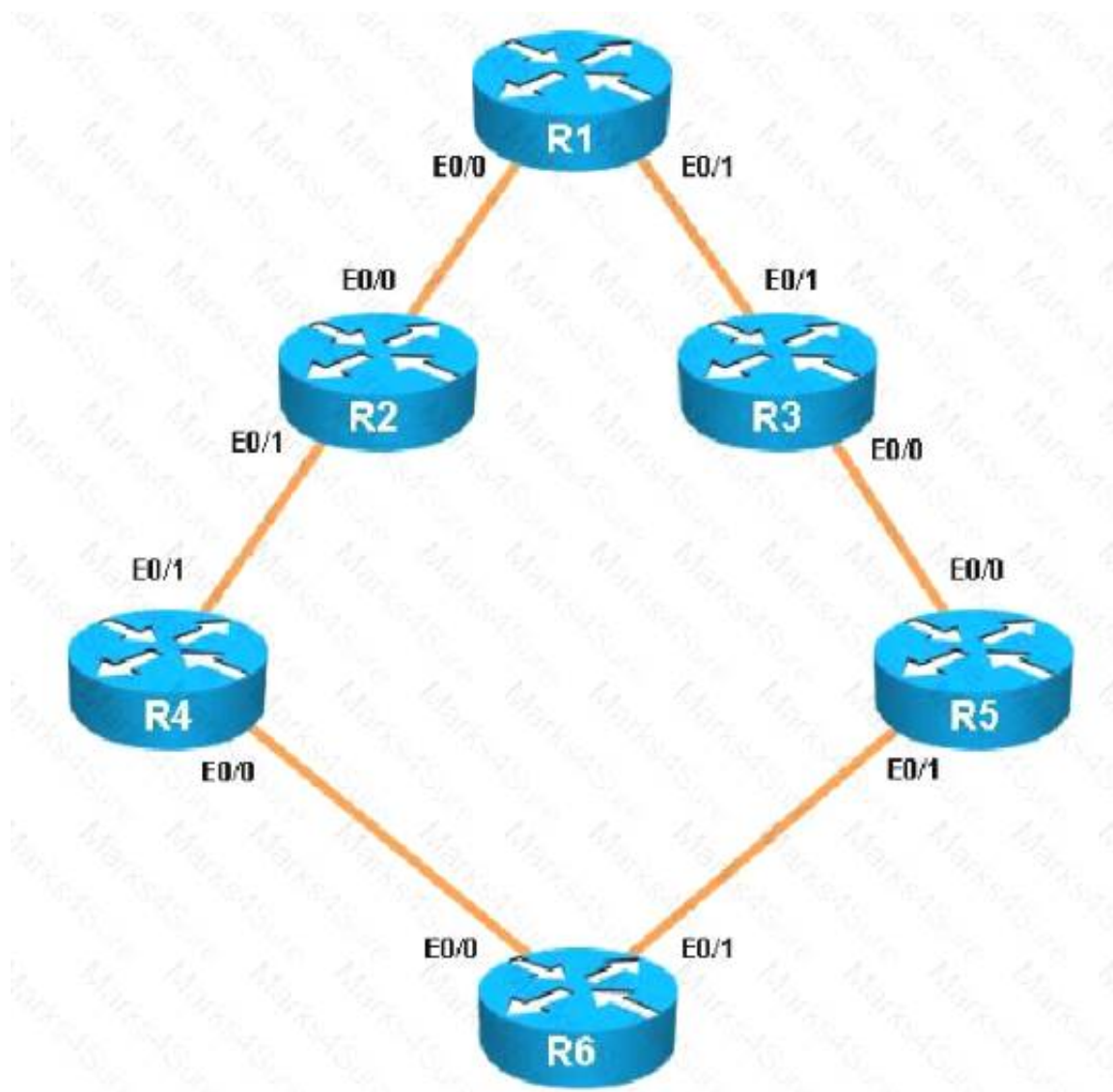
Which two routers can do OSPF route summarization?. (Choose Two)

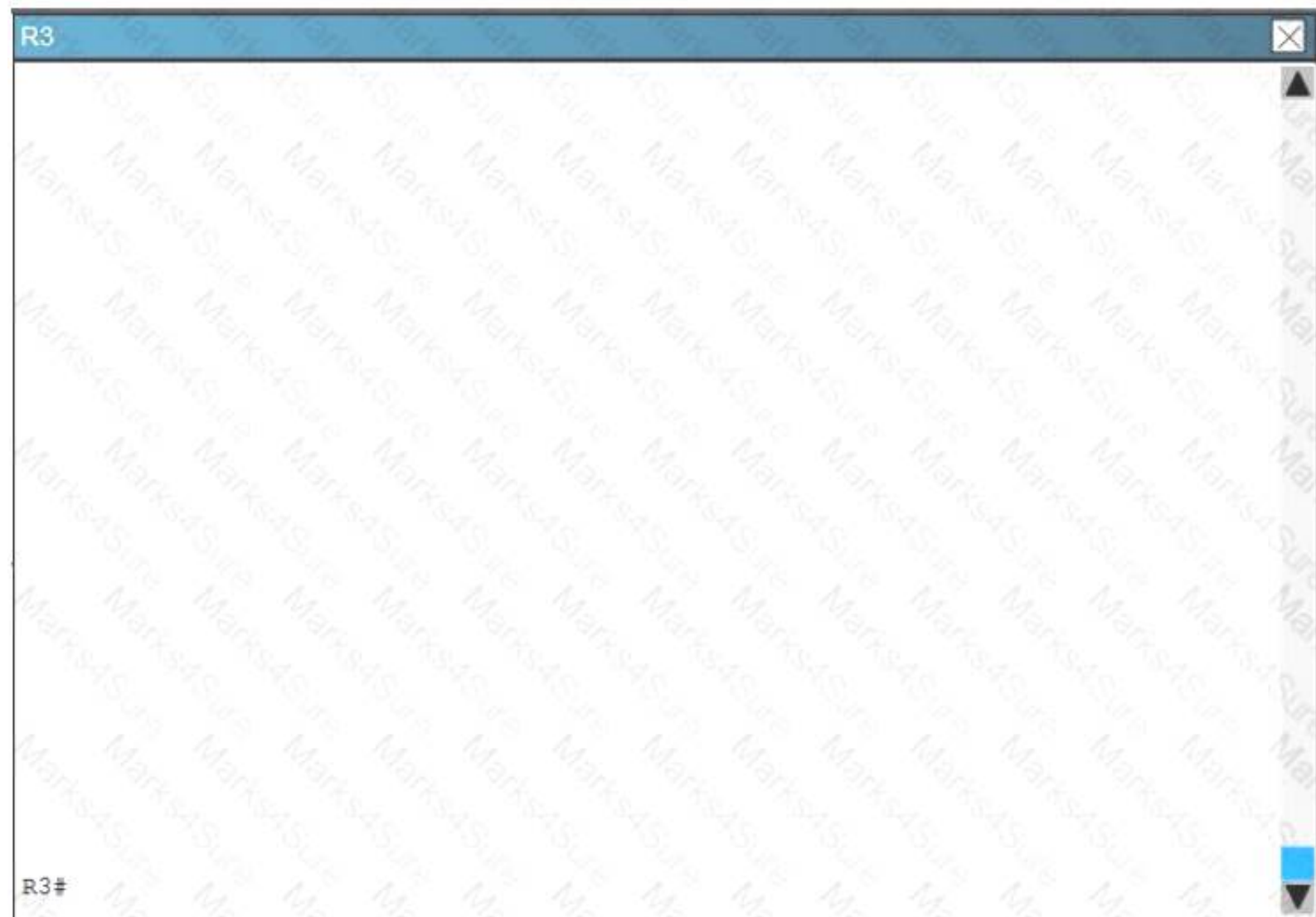
- A. ABR
- B. ASBR
- C. Summary router
- D. internal router
- E. Backbone router

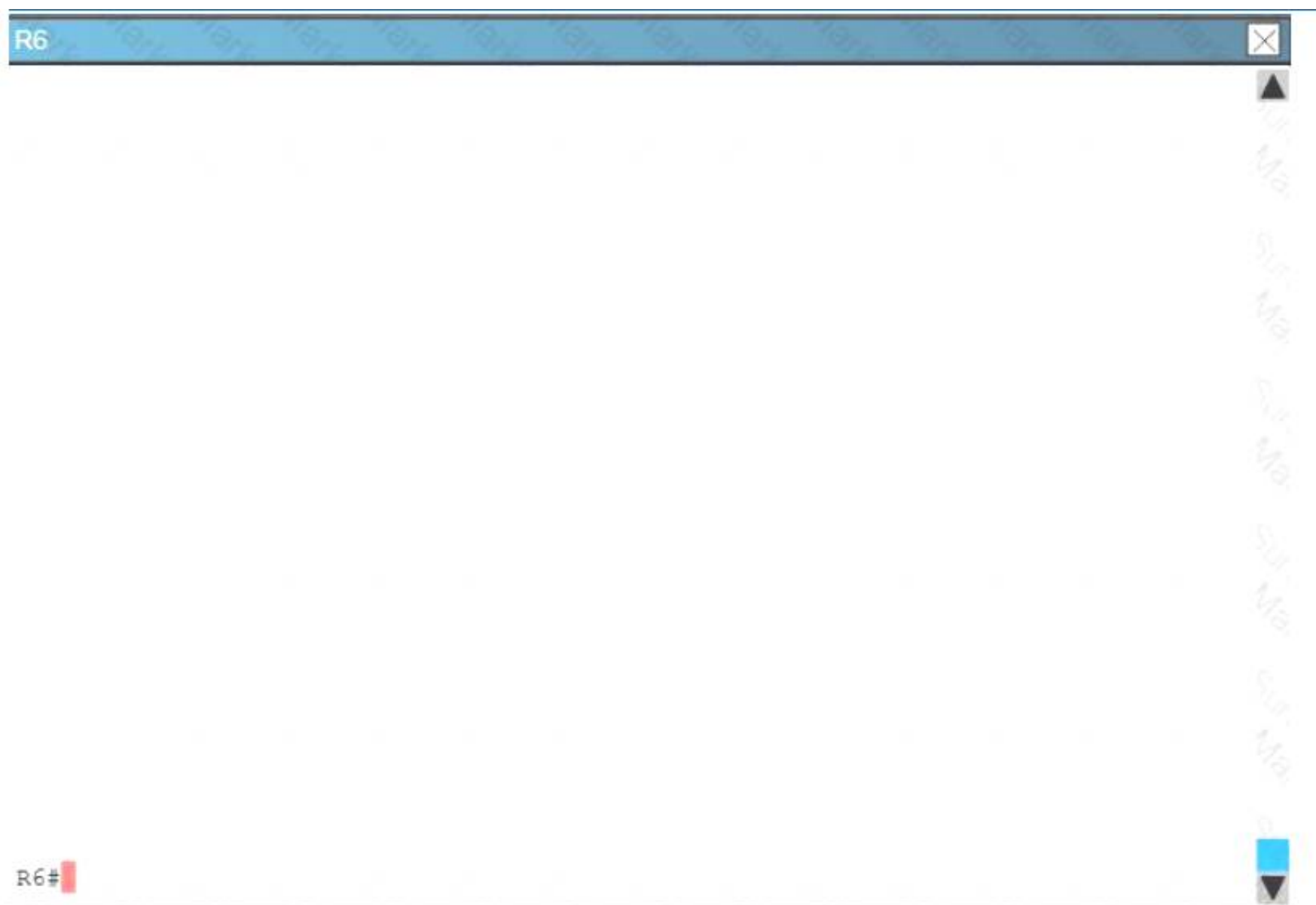
Answer: AB

NEW QUESTION 73

You have been asked to evaluate how EIGRP is functioning in a customer network.







Traffic from R1 to R6 is Loopback address is load shared between R1-R2-R4-R6 and R1-R3-R5-R6 paths. What is the ratio of traffic over each path?

- A. 1:1
- B. 1:5
- C. 6:8
- D. 19:80

Answer: D

NEW QUESTION 77

Which statement about the metric calculation in EIGRP is true?

- A. The maximum delay along the path is used
- B. The mean value of bandwidth between the source and destination is used
- C. The minimum bandwidth between the source and destination is used
- D. The minimum delay along the path is used

Answer: C

NEW QUESTION 80

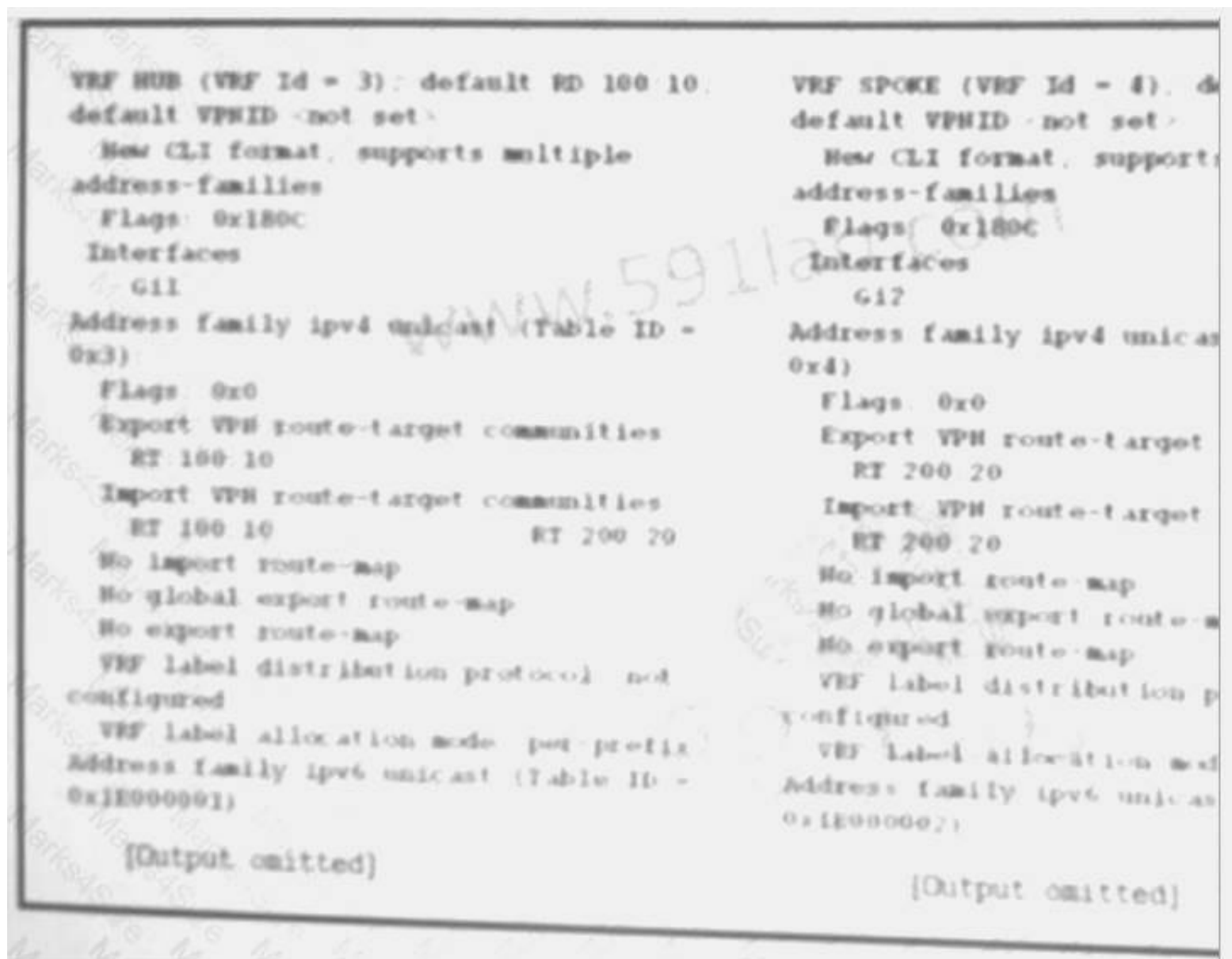
The OSPF which type of Router CAN BE aggregated? (Choose two)

- A. the ABR
- B. the ASBR
- C. Backbone Router
- D. Intra Router

Answer: AB

NEW QUESTION 84

Refer to the exhibit



A network engineer is modifying configurations for a customer that currently uses VPN connectivity between their sites. The customer has added a new spoke site but is does not have reachability to servers located at the hub Based on the output, which statement describes the cause?

- A. The interface of VRF HUB and VRF SPOKE do not match
- B. The HUB VRF is not exporting Route-Target 200:20
- C. The default VPNID is not set on VRF HUB or VRF SPOKE
- D. The SPOKE VRF is not importing Route-Target 100:10

Answer: D

NEW QUESTION 89

A network engineer configures two connected routers to run OSPF in Area 0, however, the routes fail establish adjacency. Which configuration item causes this issue?

- A. OSPF process numbers do not match on both neighbor routers
- B. The same OSPF router IDs are configured on both routers
- C. The same MTU sizes are configured on both sides
- D. Area numbers match

Answer: D

NEW QUESTION 90

Which two statements are limitations of stateful NAT64? (Choose two)

- A. It supports DNS64 only
- B. Layer 4 supports TCP only
- C. It is unable to route VRF traffic
- D. It is unable to route multicast traffic
- E. It supports FTP traffic only with an ALG

Answer: CD

NEW QUESTION 95

Which OSPF network type uses a DR?

- A. Nonbroadcast multi-access
- B. point-to-point
- C. point-to-multipoint
- D. point-to-point nonbroadcast

Answer: A

Explanation: <https://learningnetwork.cisco.com/thread/35730>

NEW QUESTION 97

You need the IP address of the devices with which the router has established an adjacency. Also, the retransmit interval and the queue counts for the adjacent routers need to be checked. What command will display the required information?

- A. show ip eigrp adjacency
- B. show ip eigrp topology
- C. show ip eigrp interfaces
- D. show ip eigrp neighbor

Answer: D

NEW QUESTION 99

Considering the IPv6 address independence requirements, which process do you avoid when you use NPTv6 for translation?

- A. rewriting of higher layer information
- B. checksum verification
- C. ipv6 duplication and conservation
- D. IPSEC AH header modification

Answer: A

NEW QUESTION 100

Which statements best describes the following two OSPF commands, which are used to summarize routes? area 0 range 192.168.110.0 255.255.0.0
summary-address 192.168.110.0 255.255.0.0

- A. The area range command defines the area where the network reside
- B. The summary-address command enables autosummanzation
- C. The area range command defines the area where the network reside
- D. The summary-address command summanzes a subnet for all areas
- E. The area range command specifies the area where the subnet resides and summarizes it to other areas.The summary-address command summarizes external routes
- F. The area range command summarizes subnets for a specific are
- G. The summary-address commandsummaries a subnet for all areas

Answer: C

NEW QUESTION 104

A network engineer executes the show crypto ipsec sa command which three pieces of information are displayed in the output? (Choose three)

- A. tagged packets
- B. untagged packets
- C. inbound crypto map
- D. path MTU
- E. invalid identity packets
- F. remaininig key

Answer: CDF

NEW QUESTION 105

When does a Cisco router send an ICMP redirect?

- A. when the packet's source and destination VRFs are different
- B. when the packet is source-routed
- C. when the packet's destination has load-balanced entries in the route table
- D. when the packet's ingress and egress interfaces are the same

Answer: D

Explanation: C:\Users\wk\Desktop\mudassar\Untitled.jpg

When Are ICMP Redirects Sent?

Cisco routers send ICMP redirects when all of these conditions are met:

- The interface on which the packet comes into the router is the same interface on which the packet gets routed out.
- The subnet or network of the source IP address is on the same subnet or network of the next-hop IP address of the routed packet.
- The datagram is not source-routed.
- The kernel is configured to send redirects. (By default, Cisco routers send ICMP redirects. The interface subcommand `no ip redirects` can be used to disable ICMP redirects.)

NEW QUESTION 106

Which action is one way to mitigate asymmetric routing on an active/active firewall setup for TCP-based connections?

- A. disabling asr-group commands on interfaces that are likely to receive asymmetric traffic
- B. performing packet captures
- C. disabling stateful TCP checks
- D. replacing them with redundant routers and allowing load balancing

Answer: C

NEW QUESTION 111

Which statement is true about EBGP?

- A. An internal routing protocol can be used to reach an EBGP neighbor.
- B. The next hop does not change when BGP updates are exchanged between EBGP neighbors.
- C. A static route can be used to form an adjacency between neighbors.
- D. EBGP requires a full mesh.

Answer: C

NEW QUESTION 114

Which type of address does OSPFv3 use to form neighbor adjacencies and to send LSAs?

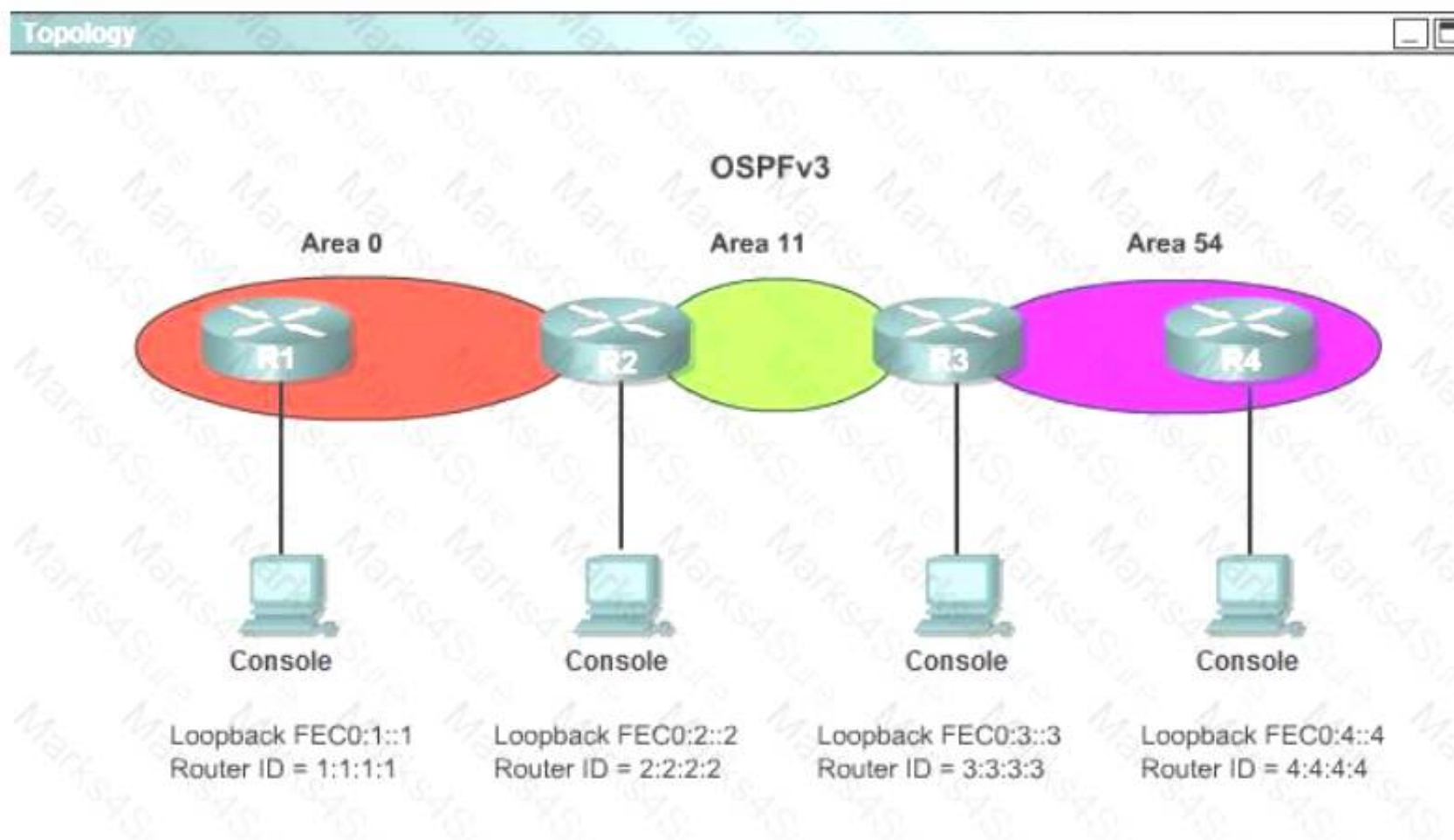
- A. unicast addresses
- B. link-local addresses
- C. unicast IPv4 addresses
- D. unicast address FF02::5

Answer: A

NEW QUESTION 116

ROUTE.com is a small IT corporation that has an existing enterprise network that is running IPv6 OSPFv3. Currently OSPF is configured on all routers. However, R4's loopback address (FEC0:4:4) cannot be seen in R1's IPv6 routing table. You are tasked with identifying the cause of this fault and implementing the needed corrective actions that use OSPF features and does not change the current area assignments. You will know that you have corrected the fault when R4's loopback address (FEC0:4:4) can be seen in R1's IPv6 routing table.

Special Note: To gain the maximum number of points you must remove all incorrect or unneeded configuration statements related to this issue.



```

R1
% Some configuration options may have changed
%LINK-3-UPDOWN: Interface FastEthernet0/1, changed state to administratively down
*Wed Oct 15 15:22:47.273: %OSPFv3-5-ADJCHG: Process 1, Nbr 2.2.2.2 on FastEthernet0/1 from FULL to DOWN, Neighbor Down: Interface down or detached
%LINK-3-UPDOWN: Interface FastEthernet0/0, changed state to up
*Wed Oct 15 15:22:57.273: %OSPFv3-5-ADJCHG: Process 1, Nbr 2.2.2.2 on FastEthernet0/0 from LOADING to FULL, Loading Done
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
*Wed Oct 15 15:22:57.273: %OSPFv3-5-ADJCHG: Process 1, Nbr 2.2.2.2 on FastEthernet0/0 from LOADING to FULL, Loading Done
Press RETURN to get started!
R1>

R2
% Some configuration options may have changed
%LINK-3-UPDOWN: Interface FastEthernet0/1, changed state to administratively down
*Wed Oct 15 15:22:47.273: %OSPFv3-5-ADJCHG: Process 1, Nbr 2.2.2.2 on FastEthernet0/1 from FULL to DOWN, Neighbor Down: Interface down or detached
%LINK-3-UPDOWN: Interface FastEthernet0/0, changed state to up
*Wed Oct 15 15:22:57.273: %OSPFv3-5-ADJCHG: Process 1, Nbr 2.2.2.2 on FastEthernet0/0 from LOADING to FULL, Loading Done
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
*Wed Oct 15 15:22:57.273: %OSPFv3-5-ADJCHG: Process 1, Nbr 2.2.2.2 on FastEthernet0/0 from LOADING to FULL, Loading Done
Press RETURN to get started!
R2>

```



```

R3
$ Some configuration options may have changed
*Wed Oct 15 15:22:47.367: %OSPFv3-5-ADJCHG: Process 1, Nbr 4.4.4.4 on OSPFv3_VL0
  from LOADING to FULL, Loading Done
$LINK-3-UPDOWN: Interface FastEthernet0/1, changed state to administratively down
*Wed Oct 15 15:22:47.273: %OSPFv3-5-ADJCHG: Process 1, Nbr 2.2.2.2 on FastEthernet0/1
  from FULL to DOWN, Neighbor Down: Interface down or detached
$LINK-3-UPDOWN: Interface FastEthernet0/0, changed state to up
*Wed Oct 15 15:22:57.273: %OSPFv3-5-ADJCHG: Process 1, Nbr 2.2.2.2 on FastEthernet0/0
  from LOADING to FULL, Loading Done
$LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
*Wed Oct 15 15:22:57.273: %OSPFv3-5-ADJCHG: Process 1, Nbr 2.2.2.2 on FastEthernet0/0
  from LOADING to FULL, Loading Done
Press RETURN to get started!
R3>

R4
$ Some configuration options may have changed
$LINK-3-UPDOWN: Interface FastEthernet0/1, changed state to administratively down
*Wed Oct 15 15:22:47.273: %OSPFv3-5-ADJCHG: Process 1, Nbr 2.2.2.2 on FastEthernet0/1
  from FULL to DOWN, Neighbor Down: Interface down or detached
*Wed Oct 15 15:22:47.367: %OSPFv3-5-ADJCHG: Process 1, Nbr 3.3.3.3 on OSPFv3_VL0
  from LOADING to FULL, Loading Done
$LINK-3-UPDOWN: Interface FastEthernet0/0, changed state to up
*Wed Oct 15 15:22:57.273: %OSPFv3-5-ADJCHG: Process 1, Nbr 2.2.2.2 on FastEthernet0/0
  from LOADING to FULL, Loading Done
$LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
*Wed Oct 15 15:22:57.273: %OSPFv3-5-ADJCHG: Process 1, Nbr 2.2.2.2 on FastEthernet0/0
  from LOADING to FULL, Loading Done
Press RETURN to get started!
R4>

```

Answer:

Explanation: To troubleshoot the problem, first issue the show running-config on all of 4 routers. Pay more attention to the outputs of routers R2 and R3. The output of the "show running-config" command of R2:

```
<output omitted>
!
ipv6 router ospf 1
router-id 2.2.2.2
log-adjacency-changes
!
<output omitted>
```

The output of the "show running-config" command of R3:

```
<output omitted>
!
ipv6 router ospf 1
router-id 3.3.3.3
log-adjacency-changes
area 54 virtual-link 4.4.4.4
!
<output omitted>
```

We knew that all areas in an Open Shortest Path First (OSPF) autonomous system must be physically connected to the backbone area (Area 0). In some cases, where this is not possible, we can use a virtual link to connect to the backbone through a non-backbone area. The area through which you configure the virtual link is known as a transit area. In this case, the area 11 will become the transit area. Therefore, routers R2 and R3 must be configured with the area <area id> virtual-link <neighbor router-id> command. + Configure virtual link on R2 (from the first output above, we learned that the OSPF process ID of R2 is 1):

```
R2>enable
R2#configure terminal
R2(config)#ipv6 router ospf 1
R2(config-rtr)#area 11 virtual-link 3.3.3.3
R2(config-rtr)#end
R2#copy running-config startup-config
```

(Notice that we have to use neighbor router-id 3.3.3.3, not R2's router-id 2.2.2.2) + Configure virtual link on R3 (from the second output above, we learned that the OSPF process ID of R3 is 1 and we have to disable the wrong configuration of "area 54 virtual-link 4.4.4.4"):

```
R3>enable
R3#configure terminal
R3(config)#ipv6 router ospf 1
R3(config-rtr)#no area 54 virtual-link 4.4.4.4
R3(config-rtr)#area 11 virtual-link 2.2.2.2
R3(config-rtr)#end
R3#copy running-config startup-config
```

You should check the configuration of R4, too. Make sure to remove the incorrect configuration statements to get the full points.

```
R4(config)#ipv6 router ospf 1
R4(config-router)#no area 54 virtual-link 3.3.3.3
R4(config-router)#end
```

After finishing the configuration doesn't forget to ping between R1 and R4 to make sure they work.

Note. If you want to check the routing information, use the show ipv6 route command, not "show ip route".

NEW QUESTION 120

Which set of actions does a network engineer perform to set the IPv6 address of a DHCP relay server at the VLAN interface level?

- A. Enter the global configuration mode, enable IPv6 DHCP relay from interface confi; mode, and define the IPv6 address of a DHCP relay server.
- B. Enter the global configuration mode and enable the IPv6 DHCP relay
- C. Enter the VLAN interface configuration mode, enable IPv6 DHCP relay, and define the IPv6 address of a DHCP relay server
- D. Enter the VLAN interface configuration mode and define the IPv6 address of a DHCP relay server.

Answer: C

NEW QUESTION 122

Which two statements about GRE tunnel interfaces are true? (Choose two)

- A. To establish a tunnel the source interface must be in the up/up state.
- B. To establish a tunnel the source interface must be a Loopback.
- C. A tunnel destination must be a physical interface that is in the up state.
- D. A tunnel destination must be routable but can be unreachable.
- E. A tunnel can be established when the source interface is in the up/down state.

Answer: CD

NEW QUESTION 123

Refer to the exhibit.


```
DSW1#
*Mar 22 20:51:13.647: %TCP-6-BADAUTH: Invalid MD5 digest from 5.0.0.5(29832) to 51.51.51.1(179) tableid - 0
DSW1#
*Mar 22 20:51:16.131: %TCP-6-BADAUTH: Invalid MD5 digest from 5.0.0.5(29832) to 51.51.51.1(179) tableid - 0
```

All neighbor routers are in the BGP peer group named PEER-1 All passwords are configured as Cisco. These messages are logged to the console of router DSW1, which is peering with router Core. Which two configurations allow a peering session to form between DSW1 and the Core? (Choose two.)

- A. Core(config-router)#neighbor 5.0.0.5 peer-group PEER-1 Core(config-router)#neighbor PEER-1 password cisco
- B. DSW1(config-router)#neighbor 5.0.0.5 peer-group PEER-1 DSW1(config-router)#neighbor PEER-1 password cisco
- C. DSW1(config-router)#neighbor 51.51.51.1 peer-group PEER-1 DSW1(config-router)#neighbor PEER-2 password cisco
- D. Core(config-router)#neighbor 51.51.51.1 peer-group PEER-1 Core(config-router)#neighbor PEER-1 password cisco
- E. Core(config-router)#neighbor 5.0.0.5 peer-group PEER-2 Core(config-router)#neighbor PEER-1 password cisco

Answer: AC

NEW QUESTION 128

Where the output will be shown of the command debug condition interface fa0/1 ?

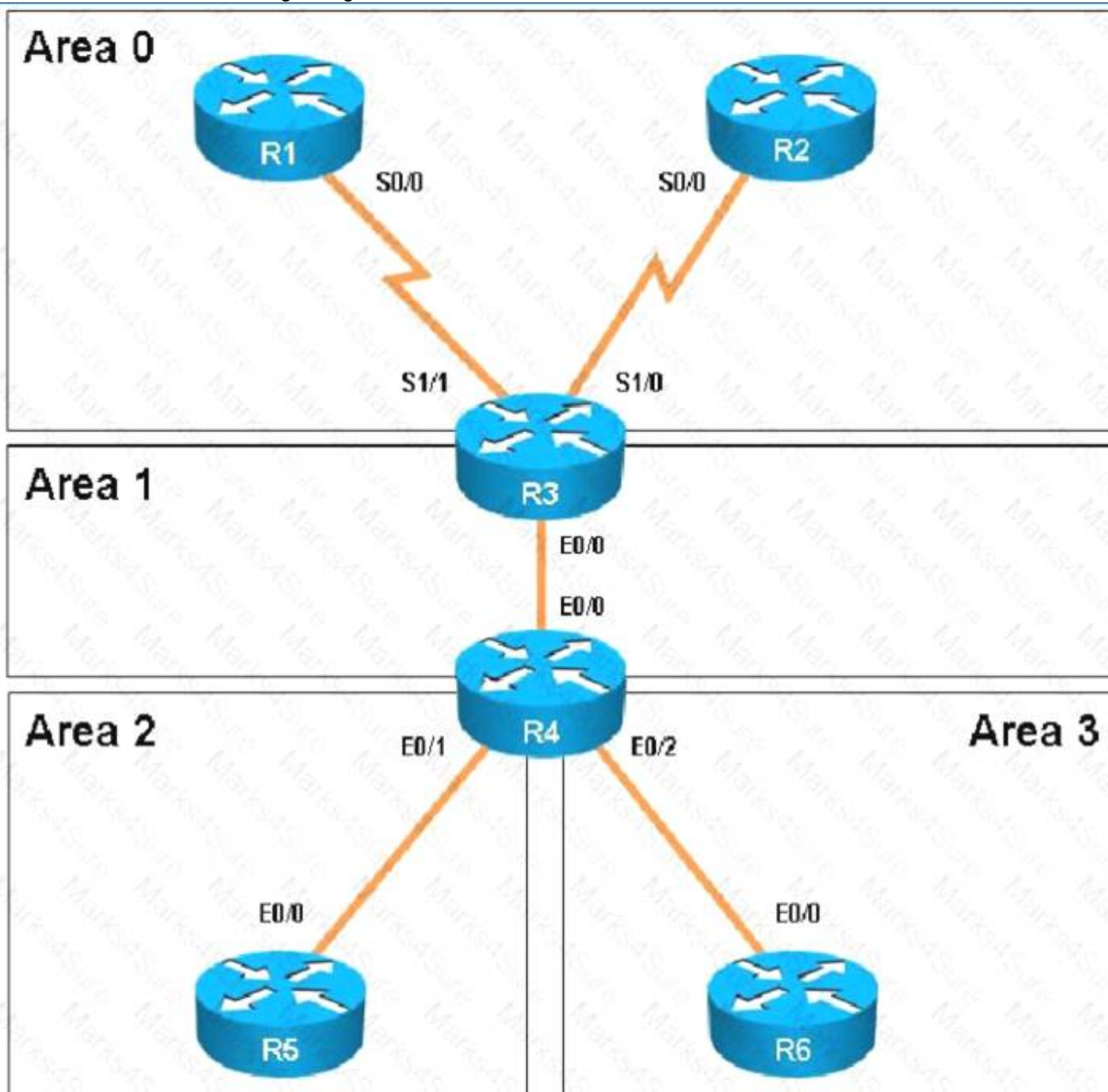
- A. it will show on interface f0/1
- B. it will show on interface f0/0
- C. both interfaces will show debugging output
- D. an interface cannot be used as condition

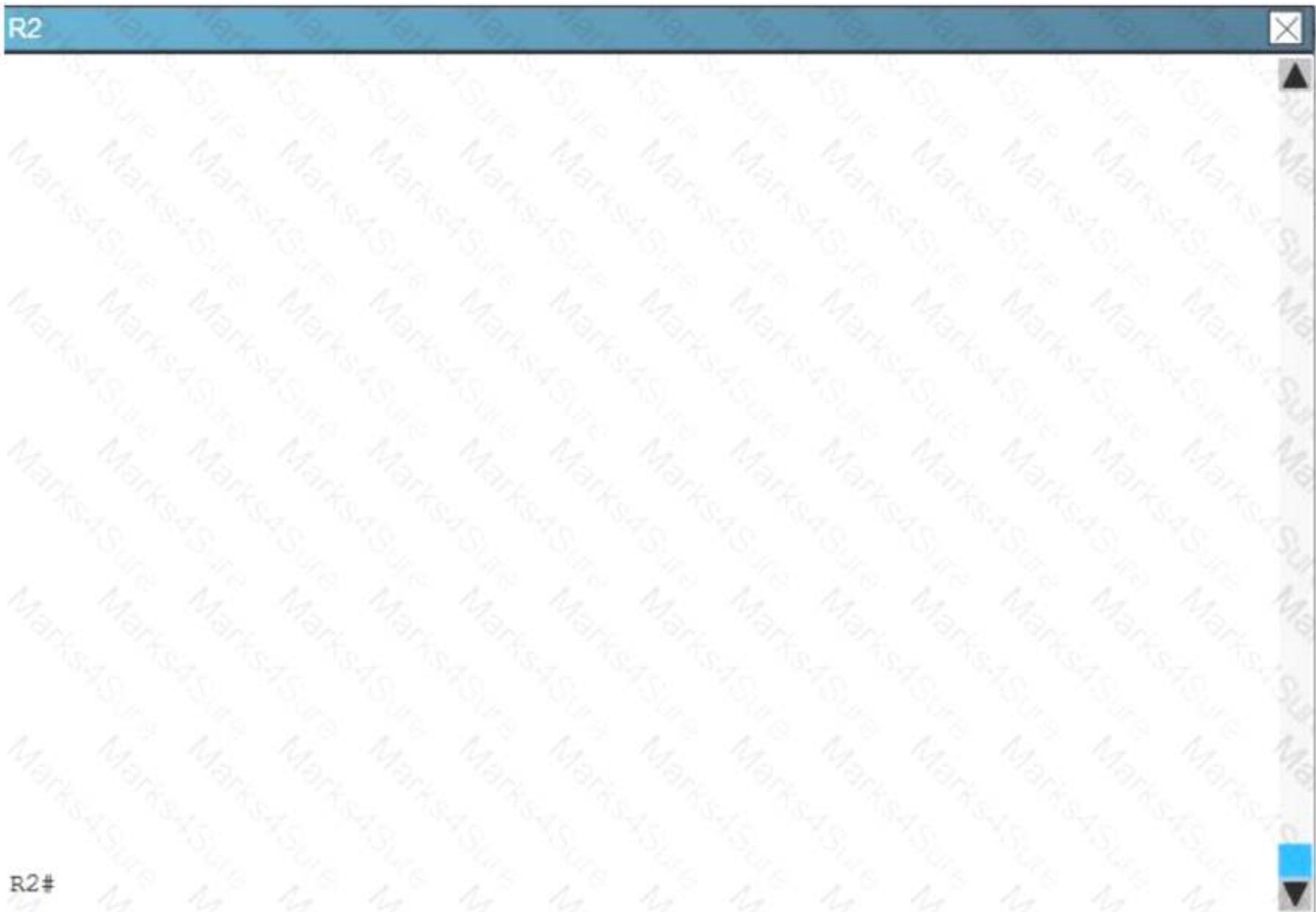
Answer: A

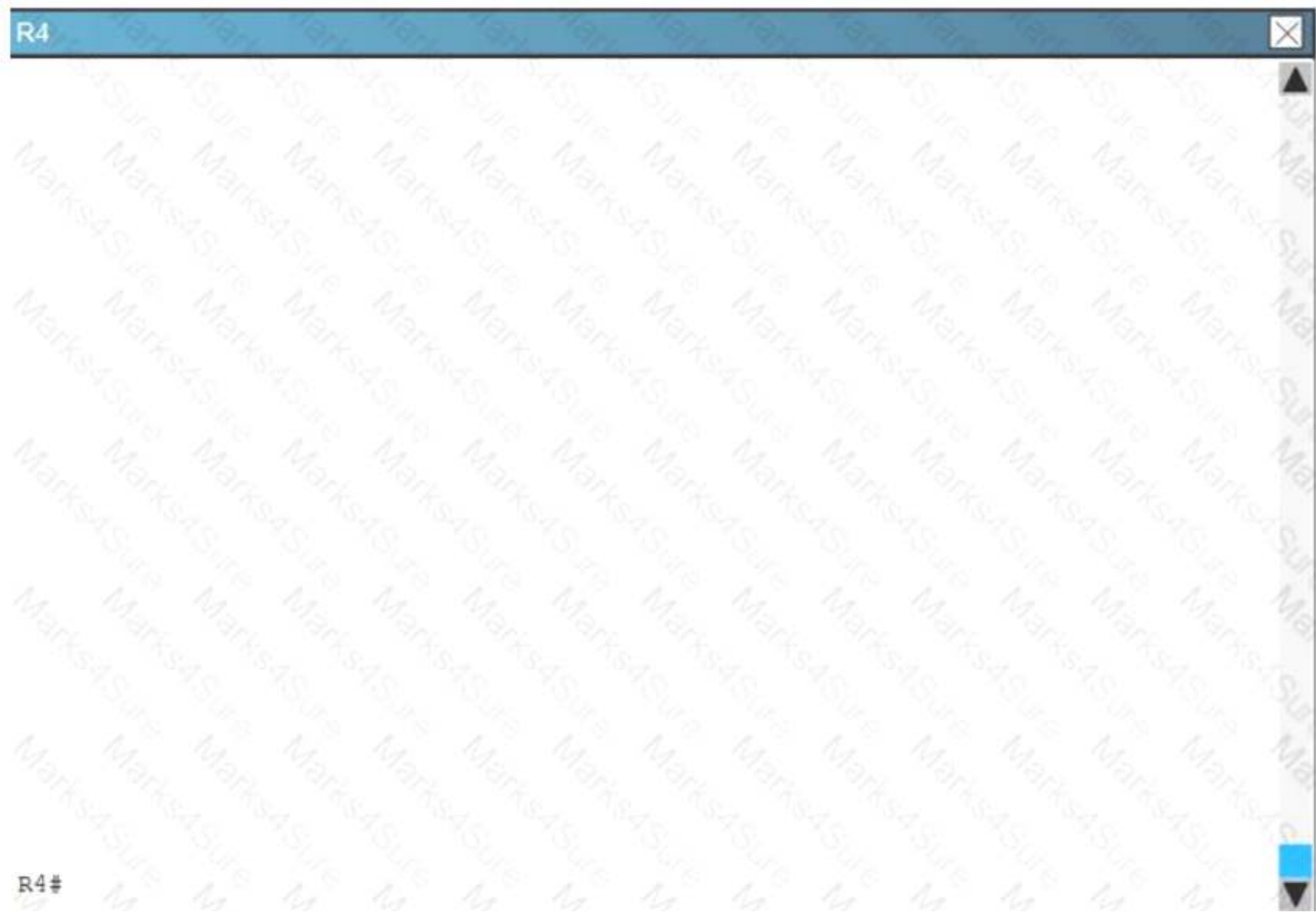
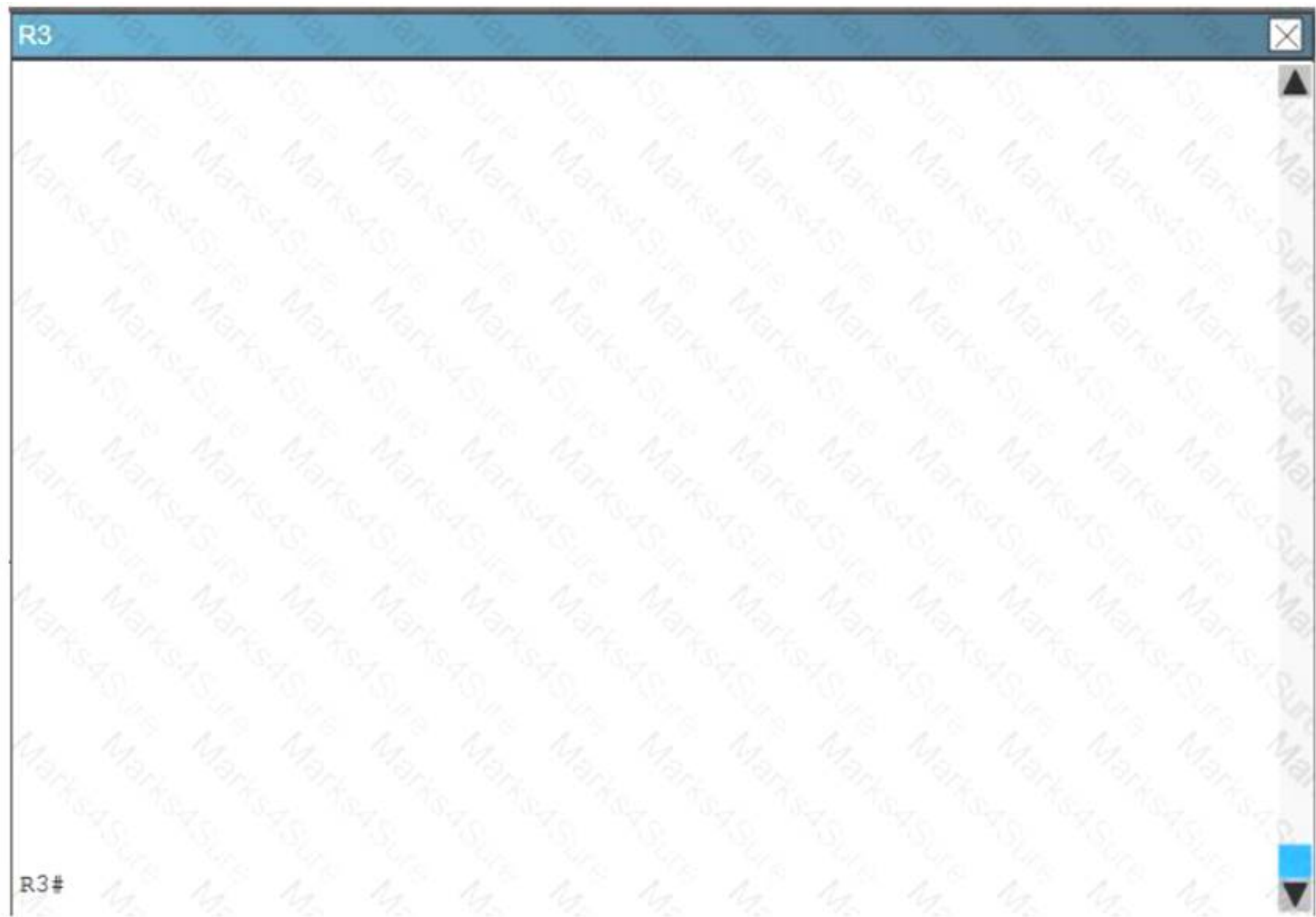
NEW QUESTION 133

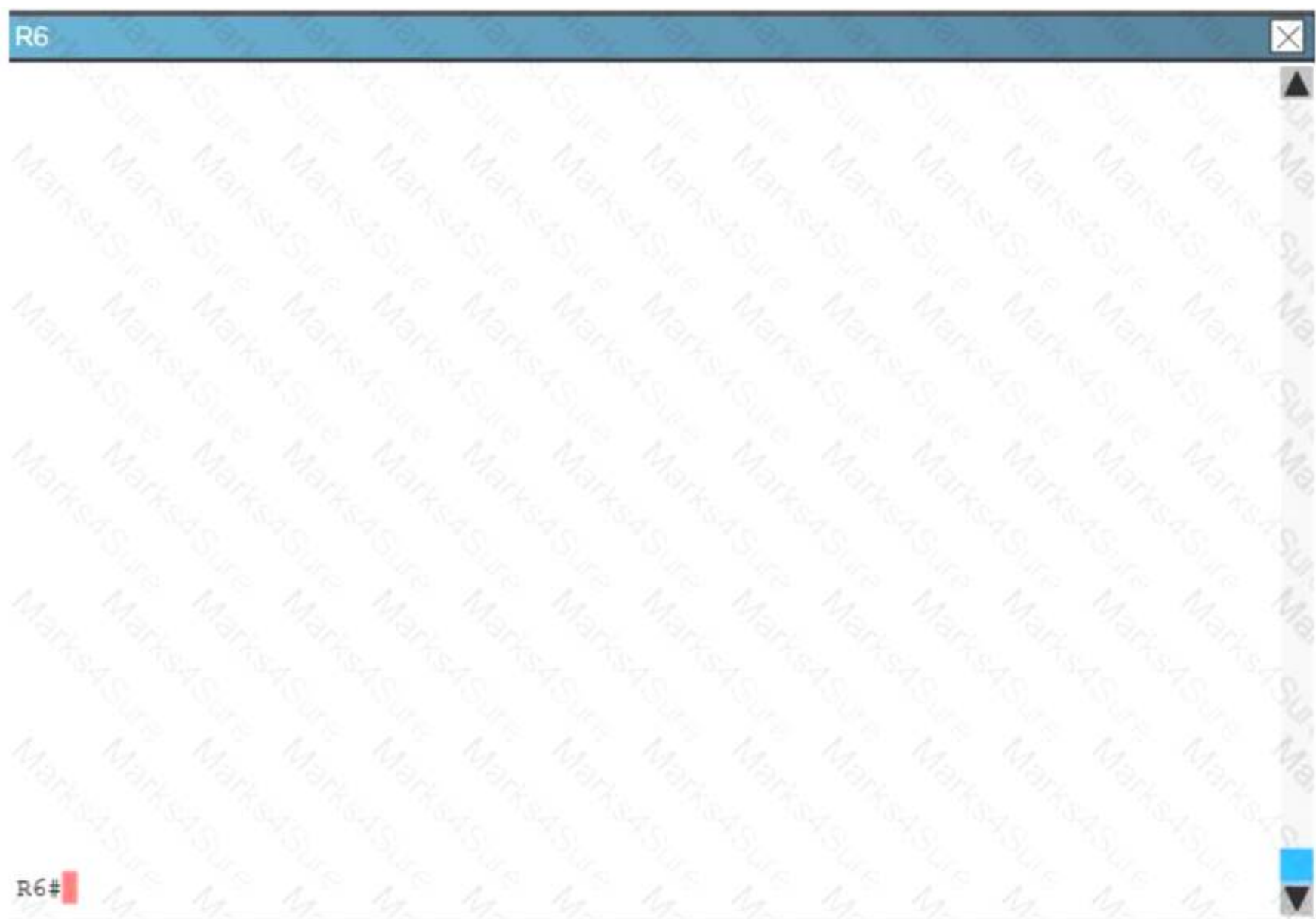
Scenario:

You have been asked to evaluate an OSPF network setup in a test lab and to answer questions a customer has about its operation. The customer has disabled your access to the show running-config command.









- A. The R1-R3 link needs the neighbor command for the adjacency to stay up
- B. The R2-R3 link OSPF timer values are 30, 120, 120
- C. The R1-R3 link OSPF timer values should be 10,40,40
- D. R3 is responsible for flooding LSUs to all the routers on the network.

NEW QUESTION 136

Refer to the exhibit.



You notice that traffic from R1 to the 192.168.10.0/24 network prefers the path through R3 instead of the least-cost path through R2. What is the most likely reason for this route selection?

- A. OSPF prefers external routes over interarea routes.
- B. OSPF prefers interarea routes over intra-area routes.
- C. OSPF prefers external routes over intra-area routes.
- D. OSPF prefers intra-area routes over interarea routes

Answer: D

NEW QUESTION 137

Which NAT command do you enter to disable dynamic ARP learning on an interface?

- A. R1(config-if)#ip nat enable
- B. R1(config-if)#ip nat inside
- C. R1(config)#ip nat service
- D. R1(config-if)#ip nat outside
- E. R1(config)#ip nat allow-static-host

Answer: E

NEW QUESTION 141

How to set up IP SLA to monitor Bandwidth between the certain limits?

- A. Timer
- B. Frequency
- C. Threshold
- D. Queue-limit

Answer: C

NEW QUESTION 146

Which two statements are differences between AAA with TACACS+ and AAA with RADIUS? (Choose two)

- A. Only RADIUS uses TCP
- B. Unlike TACACS+, RADIUS sends packets with only the password encrypted
- C. Unlike TACACS+, RADIUS supports accounting and authorization only
- D. Only TACACS+ uses TCP
- E. Only TACACS+ combines authentication and authorization

Answer: BD

NEW QUESTION 147

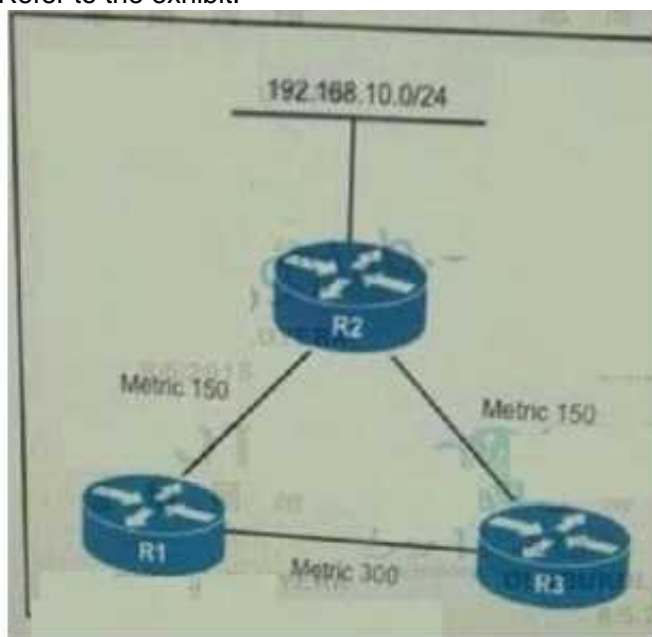
In which network environment is AAA with RADIUS most appropriate?

- A. when Apple Talk Remote Access is in use
- B. when NetBIOS Frame Control Protocol is in use
- C. when users require access to only one device at a time
- D. when you need to separate all AAA services

Answer: C

NEW QUESTION 150

Refer to the exhibit.



You want router R1 to perform unequal-cost routing to the 192.168.10.0/24 network. What is the smallest EIGRP variance value that you can configure on R1 to achieve this result?

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

Answer: A

NEW QUESTION 155

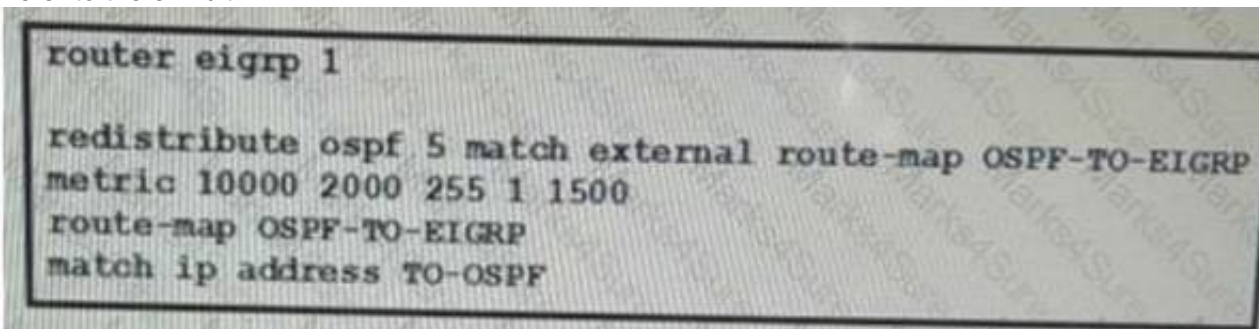
Which type of Netflow information is displayed when the show ip flow export command is executed?

- A. sent status and statistics
- B. top talkers
- C. export interface configurations
- D. local status and statistics

Answer: D

NEW QUESTION 157

Refer to the exhibit.



Which routes from OSPF process 5 are redistributed into EIGRP?

- A. E1 and E2 subnets matching access list TO-OSPF
- B. E1 and E2 subnets matching prefix list TO-OSPF
- C. only E2 subnets matching access list TO-OSPF
- D. only E1 subnets matching prefix list TO-OS1

Answer: D

NEW QUESTION 160

Which task must you perform to implement EIGRP for IPv6 on a device?

- A. Use the ipv6 cef command to enable Cisco Express Forwarding on the device.
- B. Configure a loopback interface on the device.
- C. Manually configure the router ID
- D. Statically configure a neighbor

Answer: C

NEW QUESTION 165

What does SNMP v2c use for authentication?

- A. community string
- B. hash algorithm
- C. SSL certificate
- D. username and password

Answer: A

NEW QUESTION 167

A network engineer wants to implement an SNMP process for host machines using the strongest security available which command accomplishes this task?

- A. router(config)#snmp-server-host 172-16-200.225 traps v3
- B. router(config)#snmp-server-host 172-16-200.225 traps v2c auth
- C. router(config)#snmp-server-host 172-16-200.225 traps v1
- D. router(config)#snmp-server-host 172-16-200.225 traps v2c

Answer: A

NEW QUESTION 169

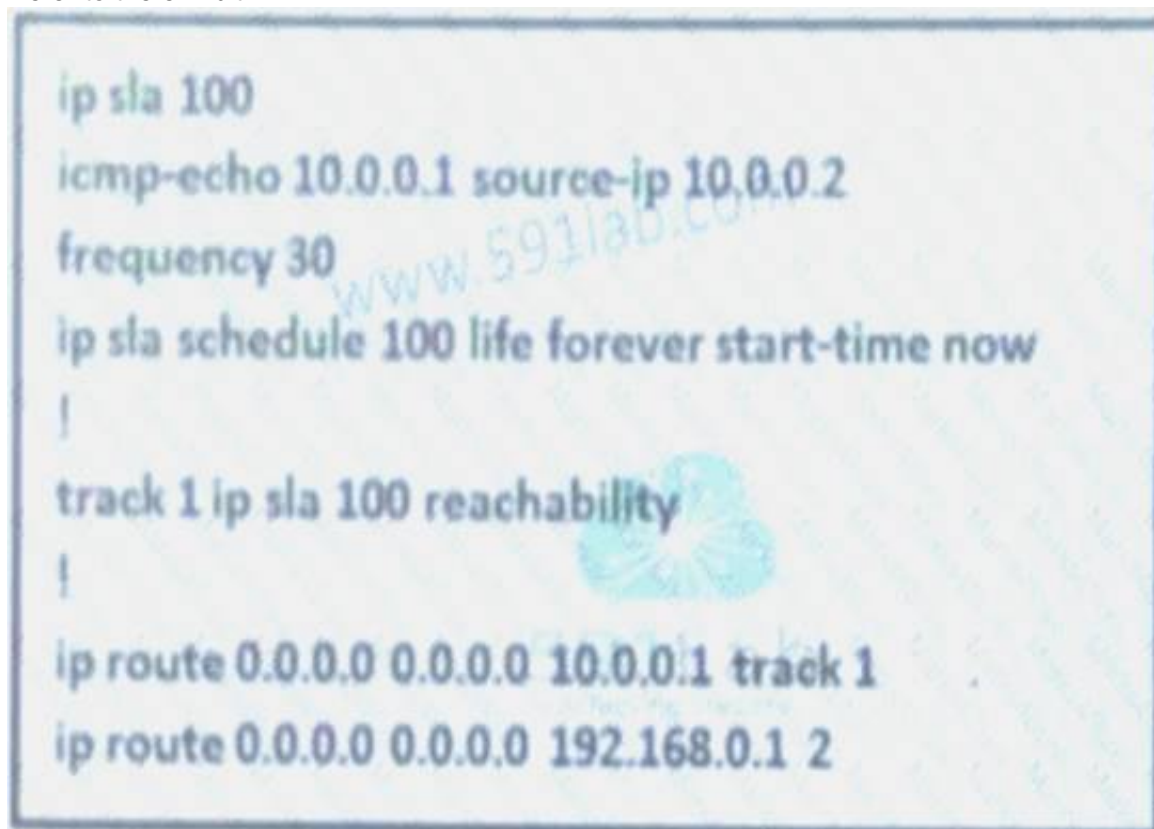
Which option prevents routing updates from being sent to the access layer switches?

- A. DWS1(config-router)#passive-interface default DWS2(config-router)#passive-interface default
- B. ALS1(config-router)#passive-interface gi0/1 ALS1(config-router)#passive-interface gi0/2 ALS2(config-router)#passive-interface gi0/1 ALS2(config-router)#passive-interface gi0/2
- C. ALS1 (config-router)#passive-interface defaultALS2 (config-router)#passive-interface default
- D. DWS1(config-router)#passive-interface gi1/1 DWS1(config-router)#passive-interface gi1/2DWS2(config-router)#passive-interface gi1/1DWS2(config-router)#passive-interface gi1/2

Answer: D

NEW QUESTION 174

Refer to the exhibit.



Which statement describes the effect of this configuration on a Cisco router?

- A. The default router through 192.168.0.1 is used only when 10.0.0.1 is unreachable
- B. The default router through 192.168.0.1 is never used.
- C. The default through 10.0.0.1 used only when 192.168.0.1 is unreachable.
- D. The default route through 10.0.0.1 is never used.

Answer: A

NEW QUESTION 178

A network engineer executes the commands logging host 172.16.200.225 and logging trap 5 Which action results when these two commands are executed together?

- A. Logging messages that have any severity level are sent to the remote server 172.16 200.225
- B. Logging messages that have a severity level of "notifications" and above (informational and above) are sent to the remote server 172.16.200.225
- C. Logged information is stored locally, showing the source as 172.16.200.225
- D. Logging messages that have a debugging severity level are sent to the remote server 172.16.200.225

Answer: B

NEW QUESTION 179

Refer to the exhibit. Which effect of this configuration is true?


```
interface gigabitethernet 2/0/0
 vnet trunk
 ip address 192.168.1.1 255.255.255.0
 vnet name cisco
```

nneettwwrrookklingg

- A. It designates the interface as a GRE tunnel endpoint
- B. it configures 802.1q trunking on the interface
- C. It designates the interface as an EVN trunk
- D. It removes VTP from the interface

Answer: B

NEW QUESTION 181

What is VRF-Lite?

- A. VRF without VPN
- B. VRF without MPLS
- C. VRF without Cisco Express Forwarding switching
- D. VRF without independent routing tables

Answer: C

NEW QUESTION 184

During which DMVPN phase is spoke-to-spoke communication enabled?

- A. Phase 4
- B. Phase 1
- C. Phase 2
- D. Phase 5

Answer: C

NEW QUESTION 187

You get a call from a network administrator who tells you that he typed the following into his router: Router(config)#router ospf 1

Router(config-router)#network 10.0.0.0 255.0.0.0 area 0

He tells you he still can't see any routes in the routing table. What configuration error did the administrator make?

- A. The wildcard mask is incorrect
- B. The OSPF area is wrong
- C. The OSPF process ID is incorrect
- D. The AS configuration is wrong

Answer: A

NEW QUESTION 191

What is the viable successor of NAT-PT?

- A. NAT64
- B. IPv6
- C. NATv6
- D. DHCPv6

Answer: A

NEW QUESTION 195

Refer to the exhibit.

```
interface gigabitethernet 2/0/0 vnet trunk
```

```
ip address 192.168.1.1 255.255.255.0
```

```
vnet name cisco
```

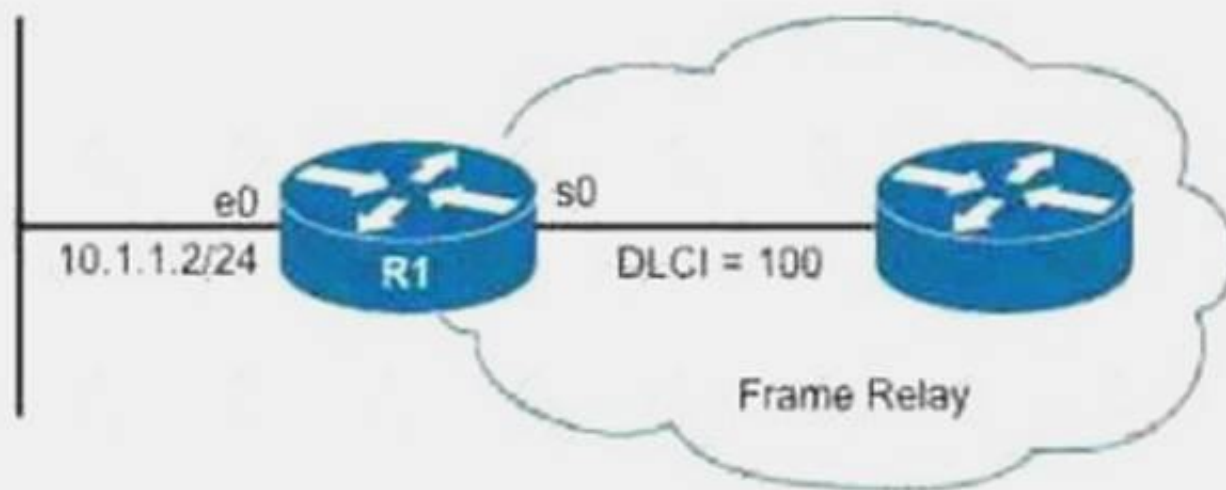
Which effect of this configuration is true?

- A. It designates the interface as a GRE tunnel endpoint
- B. It configures 802.1q trunking on the interface
- C. It designates the interface as an EVN trunk
- D. It removes VTP from the interface

Answer: C

NEW QUESTION 197

Refer to the exhibit.



```
interface Serial0
```

A

```
encapsulation frame-relay
frame-relay lmi-type ansi
```

```
! subinterface config
```

B

C

```
interface virtual-templatel
```

```
ip unnumbered ethernet 0
```

D

You are configuring the R1 Serial0 interface for a point-to-point connection. Drag and drop the required configuration statements from the left onto the correct locations from the diagram on the right. Not all commands are used.

frame-relay interface-dlci 100 ppp virtual-template1

A

interface serial0.1 point-to-point

B

interface serial0.100

C

ip unnumbered ethernet 0

D

no ip address

ppp authentication chap

Answer:

Explanation:



NEW QUESTION 199

Other than a working EIGRP configuration which component must be the same on all routers for EIGRP authentication key rollover to work correctly?

- A. time
- B. SNMP
- C. passwords
- D. SMTP

Answer: A

NEW QUESTION 203

Which two tasks does a DHCP relay agent perform?(Choose two)

- A. It forwards DHCPOFFER and DHCPCOMPLETE messages to the DHCP client.
- B. It forwards DHCPDISCOVER and DHCPREQUEST messages to the DHCP server.
- C. It forwards DHCPHELLO and DHCPREQUEST messages to the DHCP server.
- D. It forwards DHCPREQUEST and DHCPACK messages to the DHCP server!
- E. It forwards DHCPOFFER and DHCPACK messages to the DHCP client.

Answer: BE

NEW QUESTION 208

What is the output of the "show ntp associations" command?

- A. Authentication mode
- B. Facility configured
- C. Shows the NTP synchronized servers configured on the device
- D. Security key config

Answer: C

NEW QUESTION 213

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

- A. It is enabled on a per-interface basis
- B. Strict mode is most appropriate for networks with asymmetric routing
- C. Strict mode may drop legitimate traffic
- D. The keyword any can be used with both strict mode and loose mode
- E. Loose mode may drop traffic when asymmetric routing occurs on the network

Answer: AD

NEW QUESTION 217

Which LAN feature enables a default gateway to inform its end devices when a better path to a destination is available?

- A. HSRP
- B. proxy ARP

- C. ICMP redirects
- D. ICMP unreachable

Answer: C

NEW QUESTION 220

Which three benefits does the Cisco Easy Virtual Network provide to an enterprise network? (Choose three)

- A. simplified Layer 3 network virtualization
- B. improved shared services support
- C. enhanced management, troubleshooting, and usability
- D. reduced configuration and deployment time for dot1q trunking
- E. increased network performance and throughput
- F. decreased BGP neighbor configurations

Answer: ABC

NEW QUESTION 221

Which technology is required on an EVN trunk interface?

- A. NAT
- B. 802.1q
- C. VRF-Lite
- D. IS-IS

Answer: C

NEW QUESTION 225

Which three methods can a network engineer used to fix a metric-based routing loop in the network?(choose three)

- A. Filter routes manually using prefix lists
- B. Implement proper network summarization on key routing points
- C. Utilize route database filters
- D. Filter routes based on tags
- E. Implement offset lists at network boundaries
- F. Filter routes manually using distribute lists

Answer: DEF

NEW QUESTION 228

If you want to migrate an IS-IS network to another routing protocol with a lower AD? Which two protocol do you consider?

- A. UDP
- B. internal BGP
- C. TCP/IP
- D. EIGRP
- E. OSPF
- F. RIP

Answer: DE

NEW QUESTION 232

Refer to the exhibit.

```
ip sla 100
icmp-echo 10.0.0.1 source-ip 10.0.0.2
frequency 30
ip sla schedule 100 life forever start-time now
!
track 1 ip sla 100 reachability
!
ip route 0.0.0.0 0.0.0.0 10.0.0.1 track 1
ip route 0.0.0.0 0.0.0.0 192.168.0.1 2
```

Which statement describes the effect of this configuration on a Cisco router'?

- A. The default route through 10 0 0 1 is never used
- B. The default route through 192 168 0 1 is used only when 10 0 0 1 is unreachable
- C. The default route through 192 168 0.1 is never used
- D. The default route through 10 0 0 1 is used only when 192 168 0 1 is unreachable

Answer: D

NEW QUESTION 233

Which access list entry check for an ACK within a packet TCP header?

- A. access-list 49 permit tcp any any eq 21 established
- B. access-list 49 permit tcp any any eq 21 tcp-ack
- C. cess-list 149 permit tcp any any eq 21 established
- D. access-list 49 permit ip any any eq 21 tcp-ack

Answer: C

NEW QUESTION 237

50. Which SNMP verification command shows the encryption and authentication protocols that are used in SNMPv3?

- A. show snmp vi
- B. show snmp user
- C. show snmp group
- D. show snmp

Answer: B

NEW QUESTION 242

Which two features were added in MSCHAP version 2?(choose 2)

- A. Mutual authentication between peers.
- B. Using the MD5 hash for stronger security
- C. Using three-way handshakes for authentication.
- D. Ability to change an expired password
- E. Backward-compatibility with MSCHAP version 1.

Answer: AD

NEW QUESTION 247

Drag and drop the IPv6 NAT characteristic from the left onto the correct IPv6 NAT category on the right.

supports IPv6 prefix 64:ff9b::/96	network-specific stateful NAT64 prefix
IPv6 prefix assigned by an organization	NAT64
supports application layer gateway	NPTv6
translates 2001:1::/64 to 2001:2::/64	well-known stateful NAT64 prefix

Answer:

Explanation:

supports IPv6 prefix 64:ff9b::/96	translates 2001:1::/64 to 2001:2::/64
IPv6 prefix assigned by an organization	supports IPv6 prefix 64:ff9b::/96
supports application layer gateway	IPv6 prefix assigned by an organization
translates 2001:1::/64 to 2001:2::/64	supports application layer gateway

NEW QUESTION 250

Which technology supports overlapping IP addresses on a single interface?

- A. policy-based routing
- B. VRF-Lite
- C. On-Demand Routing
- D. QoS

Answer: B

NEW QUESTION 253

What is the minimum log level for the event generated when an ACL drops a packet?

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

Answer: D

NEW QUESTION 257

What percent of R1 interfaces bandwidth is EIRGRP allowed to use?

- A. 10
- B. 20
- C. 30
- D. 40

Answer: B

NEW QUESTION 260

Which two statements about NetFlow templates are true? (Choose two.)

- A. Only NetFlow version 9 is template based.
- B. NetFlow version 5 and version 9 are template based.
- C. Only NetFlow version 5 is template based.
- D. Template can increased bandwidth usage.
- E. They can increase overall performance.
- F. They can reduce bandwidth usage.

Answer: AD

NEW QUESTION 263

A router was configured with the EIRGP stub command. The router advertises which types of routes?

- A. static and summary
- B. connected, static, and summary
- C. connected and static
- D. connected and summary

Answer: D

NEW QUESTION 266

Which adverse circumstance can the TTL feature prevent?

- A. routing loops
- B. DoS attacks
- C. link saturation
- D. CAM table overload

Answer: B

Explanation: <https://www.cisco.com/c/en/us/about/security-center/protecting-border-gatewayprotocol.html> C:\Users\wk\Desktop\mudassar\Untitled.jpg

Overview

Another BGP attack scenario that is listed at the beginning of this document is a Denial of Service (DoS) attack against the BGP process. The BGP Time To Live (TTL) security check is designed to protect the BGP process from these kinds of CPU-utilization-based attacks and route manipulation attempts. The BGP protocol must be examined in greater detail to understand how this protection technique works.

NEW QUESTION 267

In which two ways can split horizon issues be overcome in a Frame Relay network environment? (Choose two)

- A. enabling split horizon
- B. configuring one physical serial interface with Frame Relay to various remote sites
- C. disabling split horizon
- D. configure a loopback interface with Frame Relay to various remote sites
- E. configuring multiple subinterfaces on a single physical interface to

Answer: CE

NEW QUESTION 271

A Network engineer wants a NTP Client to be able to update the local system without updating or synchronizing with the remote system. Which keyword for the ntp access-group command is needed to accomplish this?

- A. server
- B. peer
- C. query-only
- D. server-only

Answer: A

NEW QUESTION 273

A network engineer wants to implement an SNMP notification process for host machines using the strongest security available. Which command accomplishes this task?

- A. router(config)#snmp-server host 172.16.200.225 traps v2c auth
- B. router(config)#snmp-server host 172.16.200.225 traps v1
- C. router(config)#snmp-server host 172.16.200.225 traps v3
- D. router(config)#snmp-server host 172.16.200.225 traps v2c

Answer: C

NEW QUESTION 275

Drag and drop the statement from the left onto the correct IPv6 router security features on the right.

It controls traffic to and from the router.

It filters management traffic.

It filters traffic at the interface level.

It requires the destination address for inbound traffic to be a local address.

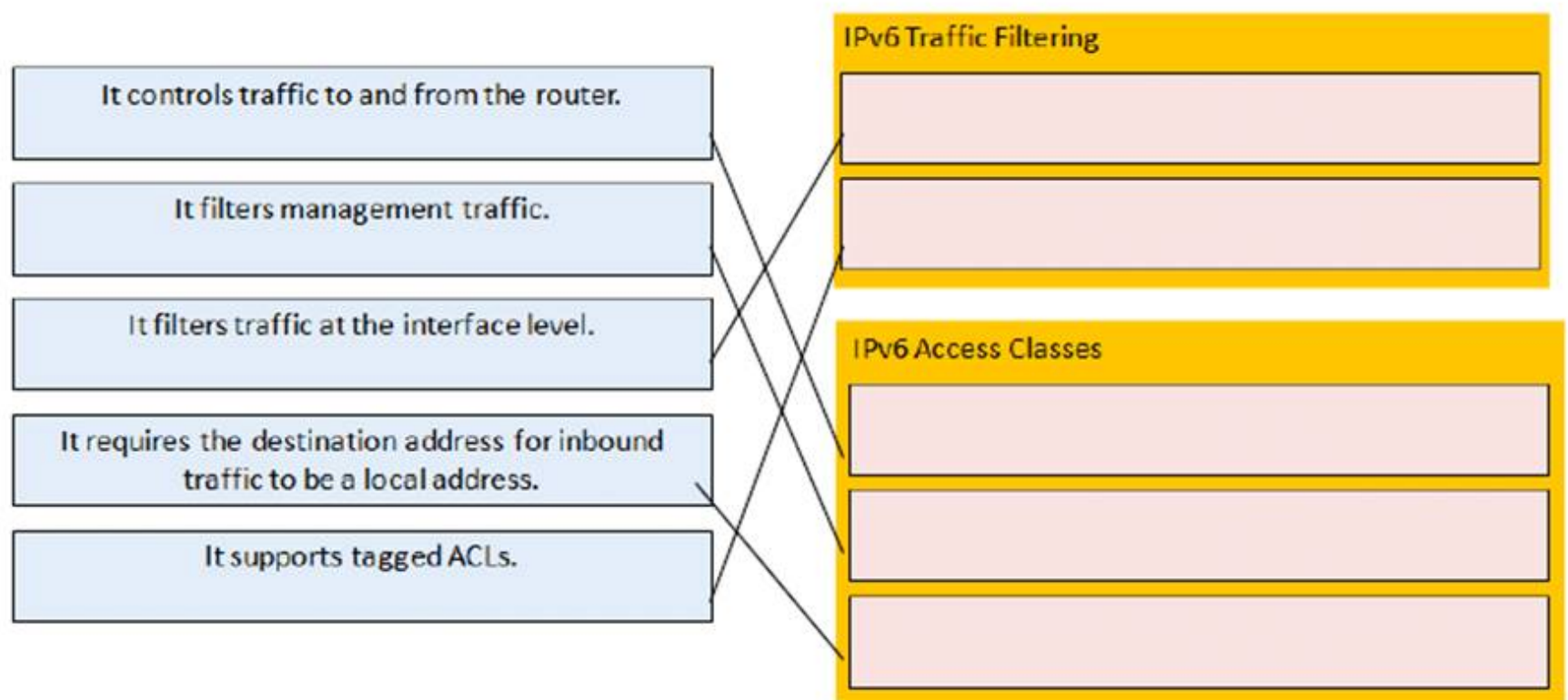
It supports tagged ACLs.

IPv6 Traffic Filtering

IPv6 Access Classes

Answer:

Explanation:



NEW QUESTION 277

Refer to the exhibit.

```
access-list 1 permit 172.16.1.0.0.0.255
ip nat inside source list 1 interface gigabitethernet0/0 overload
```

You have correctly identified the inside and outside interfaces in the NAT configuration of this device. Which effect of the configuration is true?

- A. static NAT
- B. dynamic NAT
- C. PAT
- D. NAT64

Answer: C

NEW QUESTION 281

which the Valid range for BGP private ASNs?

- A. 64512-65535
- B. 62464-65534
- C. 64512-65024
- D. 62464-64511

Answer: A

NEW QUESTION 282

A router with default RIPv2 settings loses connectivity to it's next-hop neighbor.
 How long downs the router wait before removing the route to the next hop from its route table?

- A. 30 seconds
- B. 60 seconds
- C. 180 seconds
- D. 240 seconds

Answer: D

NEW QUESTION 283

Which type of message does a device configured with the eigrp stub command send in response to EIGRP queries?

- A. invalid request
- B. unavailable
- C. stuck in active
- D. stub-only
- E. reject
- F. inaccessible

Answer: F

NEW QUESTION 287

Refer to the exhibit.

```
router eigrp 1
 redistribute ospf 100
 network 10.10.10.0 0.0.0.255
 auto-summary
 !
router ospf 100
 network 172.16.0.0 0.0.255.255 area 100
 redistribute eigrp 1
```

Which option describes why the EIGRP neighbors of this router are not learning routes that are received from OSPF?

- A. The routing protocols do not have the same AS number.
- B. There is no overlap in the subnets advertised.
- C. The subnet defined in OSPF is not part of area 0.
- D. Default metrics are not configured under EIGRP.

Answer: D

NEW QUESTION 291

Which two statements about NHRP in a DMVPN environment are true (Choose two.)

- A. It routes traffic through the tunnel.
- B. It provides address resolution to route traffic.
- C. It can authenticate VPN endpoints.
- D. It requires each endpoint to have a unique network ID.
- E. It can identify PIM-SM RPs over a tunnel.

Answer: BC

NEW QUESTION 292

Which two features are provided by EIGRP for IPv6?(choose two)

- A. Backbone areas
- B. SPF algorithm
- C. Partial updates
- D. Area border router
- E. Scaling

Answer: CE

NEW QUESTION 293

What is the maximum number of hops on a route that RIPv6 advertises as reachable?

- A. 15
- B. 30
- C. 99
- D. 255

Answer: A

Explanation: <https://quizlet.com/166800413/ccnp-ripng-flash-cards/>

NEW QUESTION 294

Refer to the exhibit. How does R1 handle the route to network 10.1.80.0/24?

```
R1
router eigrp 1
 no auto-summary
 redistribute ospf 1 route-map ospf-to-eigrp
 default-metric 10000 10 255 1 1500

ip prefix-list ccnp1 seq 5 permit 10.1.48.0/24 le 24
ip prefix-list ccnp2 seq 5 permit 10.1.80.0/24 le 32
ip prefix-list ccnp3 seq 5 permit 10.1.64.0/24 le 24

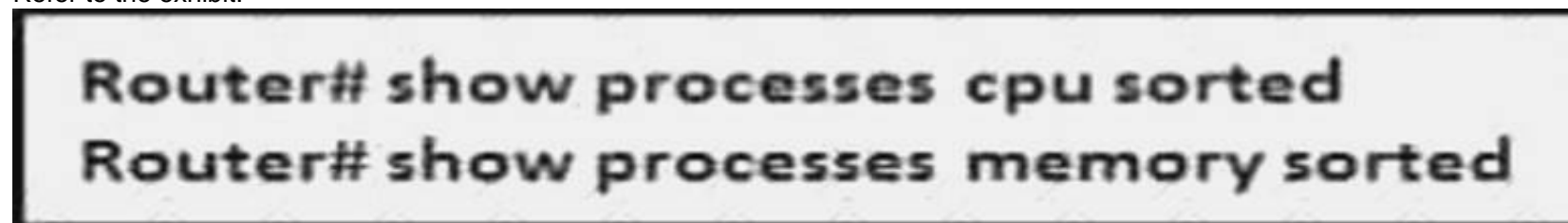
route-map ospf-to-eigrp permit 10
 match ip address prefix-list ccnp1
route-map ospf-to-eigrp permit 20
 match ip address prefix-list ccnp2
```


- A. R1 redistributes network 10.1.80.0/24 into EIGRP without changing the mask
- B. R1 changes the mask to /32 and then redistributes network 10.1.80.0/24 into EIGRP as a classful network
- C. R1 changes the mask to /32 and then redistributes network 10.1.80.0/24 into EIGRP as a classless network
- D. R1 fails to redistribute network 10.1.80.0/24 into EIGRP

Answer: A

NEW QUESTION 299

Refer to the exhibit.



Based on Cisco best practice, which statement about the output is true?

- A. The output should be analyzed by a network engineer before executing any debug commands on an IOS router in production
- B. The output should be analyzed by a network engineer before executing any configuration commands on an IOS router in production
- C. The output should be analyzed by a network engineer before allocating additional memory and CPU usage to processes on an IOS router in production
- D. The output should be analyzed by a network engineer before executing other show commands on an IOS router in production

Answer: A

NEW QUESTION 303

You are configuring a static route. Which action must you take to avoid the possibility of recursive row

- A. Use the ip route command to specify the next-hop IP address only
- B. Specify the next hop on a directly connected interface
- C. Use the ip route command to specify both the next-hop IP address and the connected interface
- D. Use the ip route command to specify the connected interface only

Answer: C

NEW QUESTION 308

A route with default RIPv2 settings loses connectivity to its next-hop neighbor. How long does the router wait before removing the route to the next hop from its route table?

- A. 30 seconds
- B. 60 seconds
- C. 180 seconds
- D. 240 seconds

Answer: D

NEW QUESTION 309

When OSPF is forming an adjacency, in which state does the actual exchange of the information in the link-state database occur?

- A. loading
- B. exchange
- C. INIT
- D. exstart

Answer: B

NEW QUESTION 314

Which two commands must you configure in the calling router to support the PPPoE client? (Choose two.)

- A. pppoe enable group
- B. mtu
- C. peer default ip address pool
- D. pppoe-client dial-pool-number
- E. bba-group pppoe

Answer: BD

NEW QUESTION 319

Refer to the exhibit. A packet capture indicates that the router is not forwarding the DHCP packets that it receives on interface FastEthernet0/0. Which command needs to be entered in global configuration mode to resolve this issue?

- A. ip dhcp relay
- B. ip helper
- C. ip forward-protocol
- D. service dhcp

Answer: C

NEW QUESTION 324

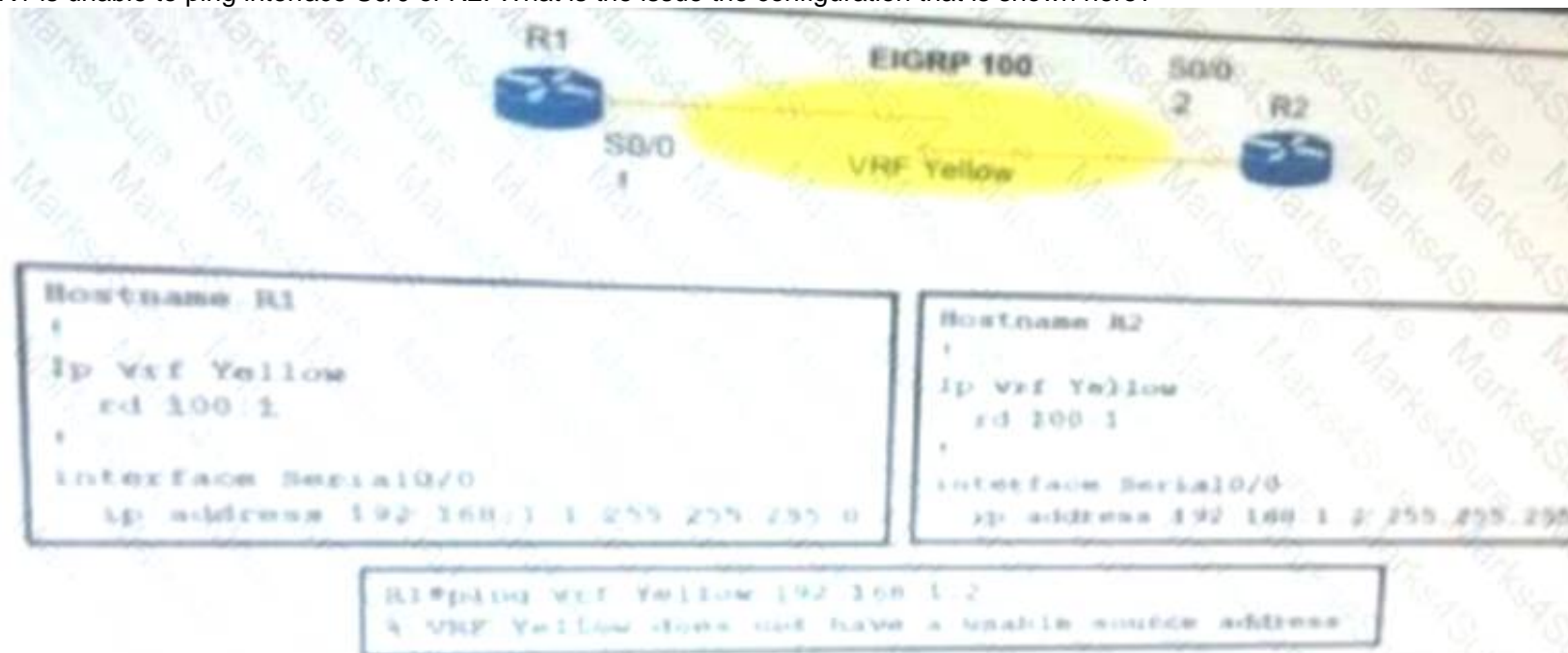
Which statement about IP SLA feature is true?

- A. It ensures that there are appropriate levels of service for network applications
- B. It classifies various traffic types by examining information within Layers 3 through 7
- C. It measures how the network treats traffic for specific applications by generating traffic that bears similar characteristics to application traffic.
- D. It keeps track of the number of packets and bytes that are observed in each flow by storing information in a cache flow

Answer: A

NEW QUESTION 328

R1 is unable to ping interface S0/0 of R2. What is the issue the configuration that is shown here?



- A. The route-target configuration command is missing.
- B. The interface IP addresses are not in the same subnet.
- C. The syntax of the ping command is wrong.
- D. The default route configuration is missing.
- E. The serial interfaces belong to the global table instead of vrf Yellow.

Answer: E

NEW QUESTION 330

Which task must you perform to enable point-to-point frame relay connection?

- A. Disable inverse ARP
- B. Configure the encapsulation type
- C. Enable inverse ARP
- D. Configure static address mapping

Answer: D

NEW QUESTION 331

A network engineer is enabling RIPng on a new customer link. Under which configuration mode is RIPng enabled?

- A. Global
- B. Router
- C. Interface
- D. IPv6

Answer: A

NEW QUESTION 336

After reviewing the EVN configuration, a network admin notice that a predefined EVN, which is know as vnet global was configured. What is the purpose of this EVN?

- A. It refers to the global context and corresponds to the default RIB.
- B. It aggregates and carries dot1q tagged traffic.
- C. It defines the routing scope for each particular EVN edge interface.
- D. It safeguards the virtual that is preconfigure to avoid mismatched routing instances.

Answer: A

NEW QUESTION 337

Which option is one way to mitigate symmetric routing on an active/active firewall setup for TCP based connections?

- A. performing packet captures

- B. disabling asr-group commands on interfaces that are likely to receive asymetnc traffic
- C. replacing them with redundant routers and allowing load balancing
- D. disabling stateful TCP checks

Answer: D

NEW QUESTION 342

Under which circumstance can TCP starvation occur?

- A. when DNS and TFTP traffic are transmitted on the same link
- B. when TCP traffic is blocked by an ACL
- C. when UDP traffic is processed in a policy-map before TCP traffic
- D. when Http and Https traffic are transmitted on the same link
- E. when TCP and UDP traffic are mixed in the same class of service

Answer: E

NEW QUESTION 344

Which two effects of symmetric routing are true? (Choose two)

- A. unicast flooding
- B. uRPF failure
- C. errdisabling of ports
- D. port security violations
- E. excessive STP reconvergence

Answer: AB

NEW QUESTION 348

OSPF chooses routes in which order, regardless of route's administrative distance and metric?

- A. Intra-Area (O) - Inter-Area (O IA) - External Type 1 (E1) - External Type 2 (E2) - NSSA Type 1 (N1) - NSSA Type 2 (N2)
- B. Intra-Area (O) - Inter-Area (O IA) - NSSA Type 1 (N1) - NSSA Type 2 (N2) - External Type 1 (E1) - External Type 2 (E2)
- C. Intra-Area (O) - Inter-Area (O IA) - NSSA Type 1 (N1) - External Type 1 (E1) - NSSA Type 2 (N2) - External Type 2 (E2)
- D. Intra-Area (O) - NSSA Type 1 (N1) - External Type 1 (E1) - Inter-Area (O IA) - NSSA Type 2 (N2) - External Type 2 (E2)
- E. Intra-Area (O) - Inter-Area (O IA) - NSSA Type 1 (N1) - External Type 1 (E1) - NSSA Type 2 (N2) - External Type 2 (E2)
- F. NSSA Type 1 (N1) - NSSA Type 2 (N2) - Intra-Area (O) - Inter-Area (O IA) - External Type 1 (E1) - External Type 2 (E2)

Answer: A

NEW QUESTION 349

When Unicast Reverse Path Forwarding is configured on an interface, which action does the interface take first when it receives a packet?

- A. It checks the ingress access lists
- B. It verifies a reverse path via the FIB to the source
- C. It checks the egress access lists
- D. It verifies that the source has a valid CEF adjacency

Answer: D

NEW QUESTION 350

Which command can be entered on router R5 to configure 80 percent of the bandwidth of a link for EIGRP Autonomous System 55?

- A. R5(config-if)#ip bandwidth percent eigrp bandwidth 55 80
- B. R5(config-pmap-c)#priority percent 80 C R5(config-if)#ip
- C. R5(config-if)#ip bandwidth percent eigrp 80 55
- D. R5(config-if)#ipv6 bandwidth-percent eigrp 80 55
- E. R5(config-if)#ipv6 bandwidth-percent eigrp 55 80

Answer: E

NEW QUESTION 353

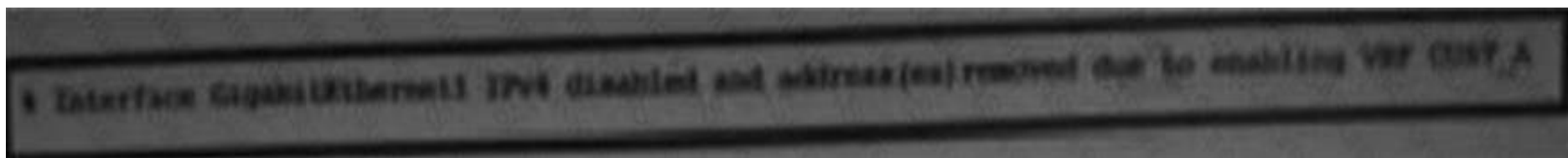
Traffic from R1 to R6 loopback address is load shared between R1-R2-R4-R6 and R1-R3-R5-R6 path. What is the ratio of the traffic over each path?

- A. 1:1
- B. 1:5
- C. 6:8
- D. 19:80

Answer: D

NEW QUESTION 358

Refer to the exhibit.



% Interface GigabitEthernet1 IPv4 disabled and address(es) removed due to enabling VRF CUST_A

an engineer is enabling VPN services for a customer and noticed the output when placing the customer facing interfaces into a VRF which action connects the issue?

- A. Reset interface Gigabit Ethernet 1.
- B. Disable the VRF CUST_A
- C. Reconfigure the IP address on Gigabit Ethernet 1.
- D. Enabling IPv6 on the interface

Answer: C

NEW QUESTION 361

Which two statements about Frame Relay point-point connections are true?

- A. They can operate normally without a DLCI map.
- B. The device can establish a point-to-point connection to the cloud without a DLCI.
- C. They use two DLCIs to communicate with multiple endpoints over the Frame Relay cloud.
- D. Changing a point-to-point subinterface to a different type requires the device to be reloaded.
- E. Each physical interface that extends to the Frame Relay cloud can support a SVC.

Answer: CD

NEW QUESTION 362

A route map was configured and it was distributing OSPF external routes

- A. Distributing E1 only
- B. Distributing E1 and E2 using prefix list
- C. Distributing E1 and E2 using access list
- D. Distributing E2 routes

Answer: B

NEW QUESTION 365

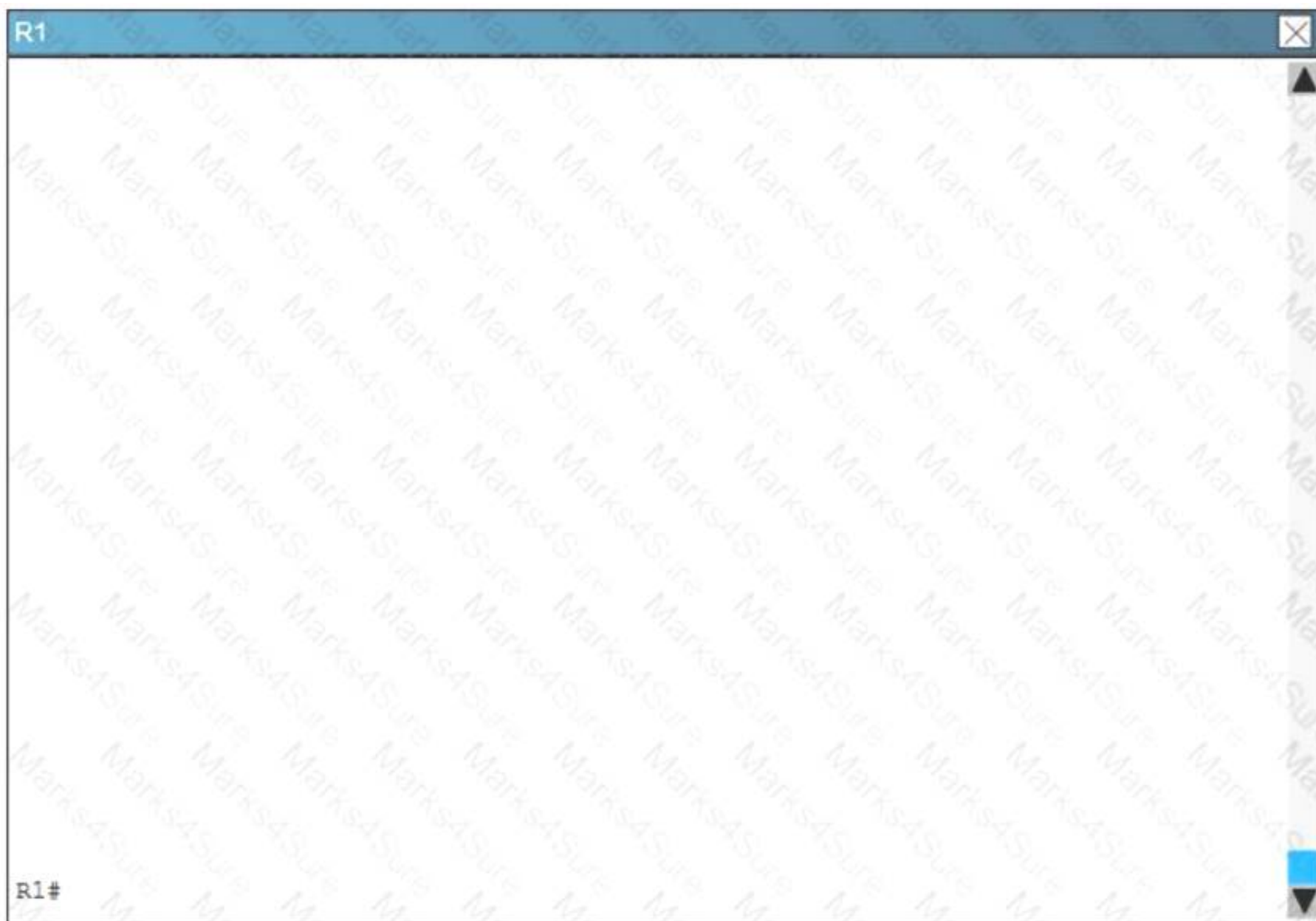
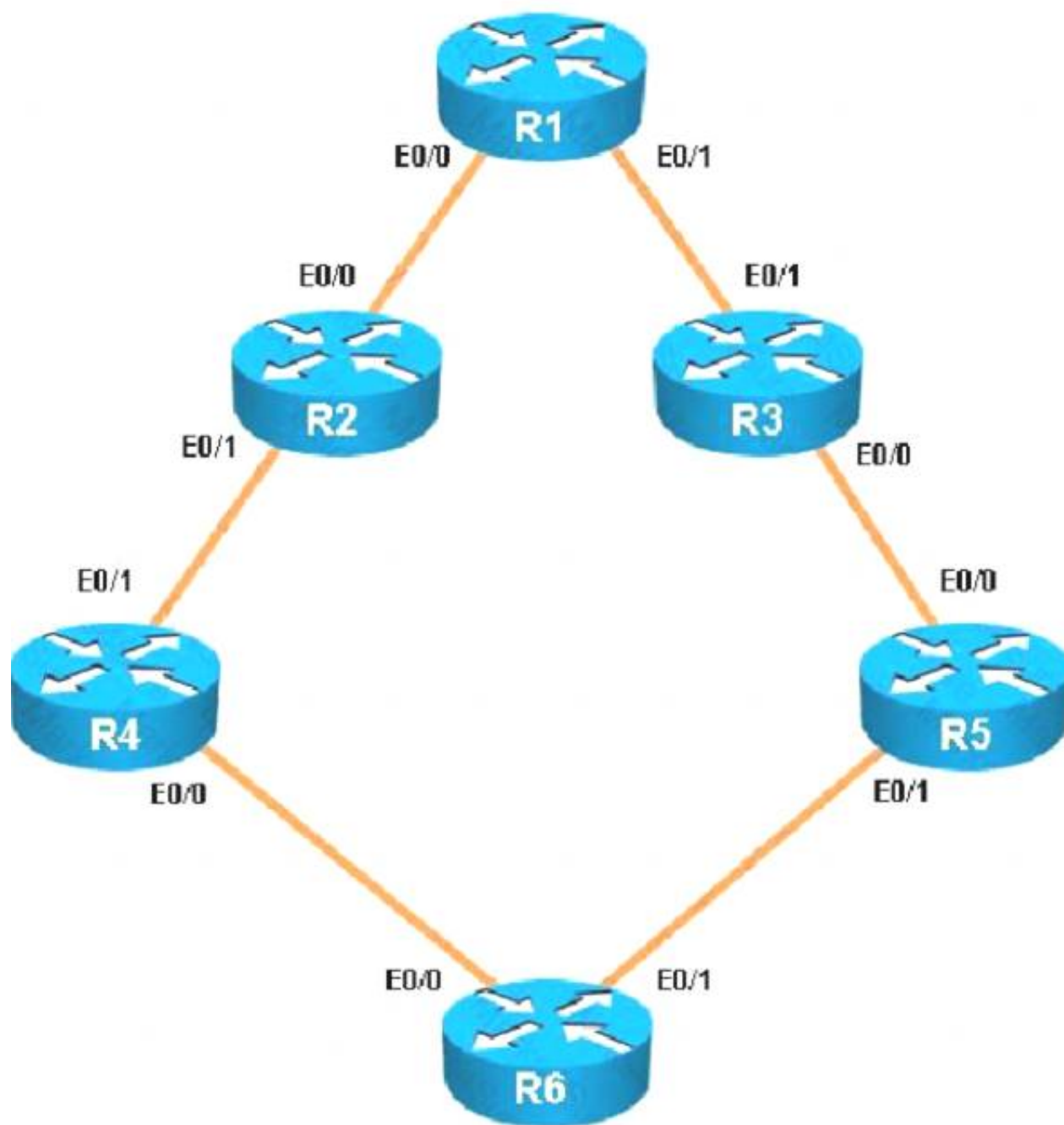
Which value determines the amount of traffic that a network path can hold in transit?

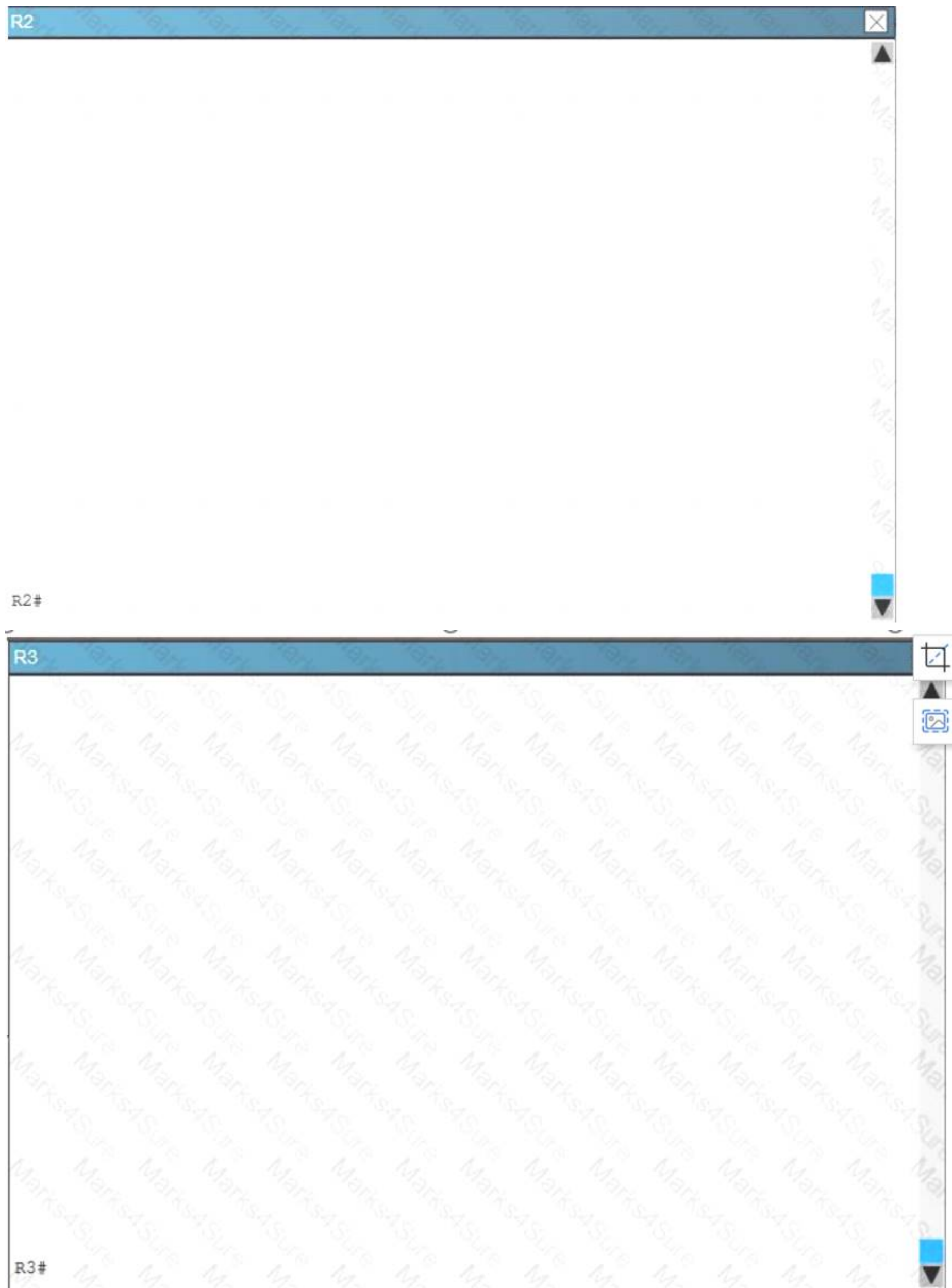
- A. route cache setting
- B. maximum window size
- C. bandwidth delay product
- D. MSS

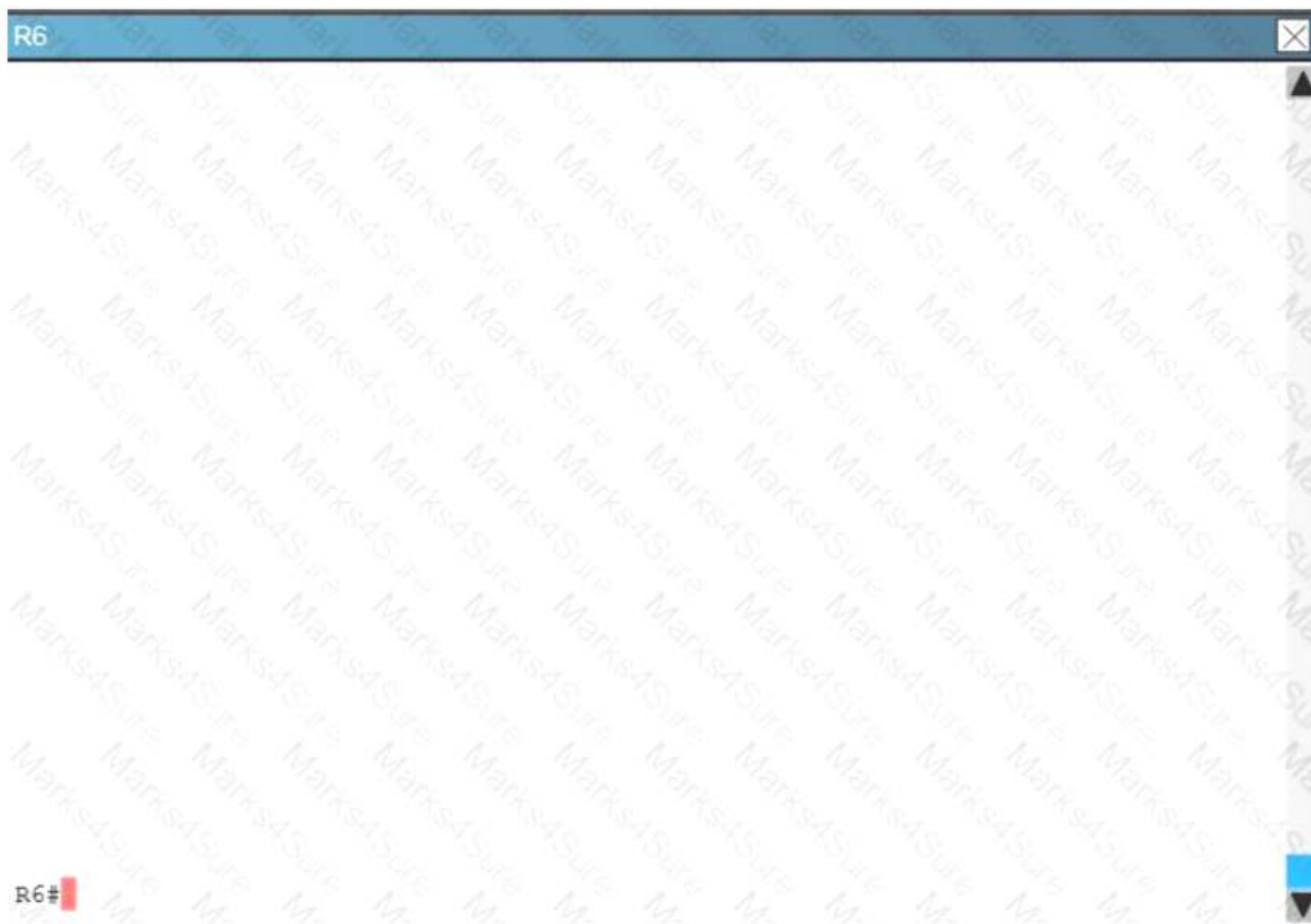
Answer: D

NEW QUESTION 370

You have been asked to evaluate how EIGRP is functioning in a customer network.







Which key chain is being used for authentication of EIGRP adjacency between R4 and R2?

- A. CISCO
- B. EIGRP
- C. key
- D. MD5

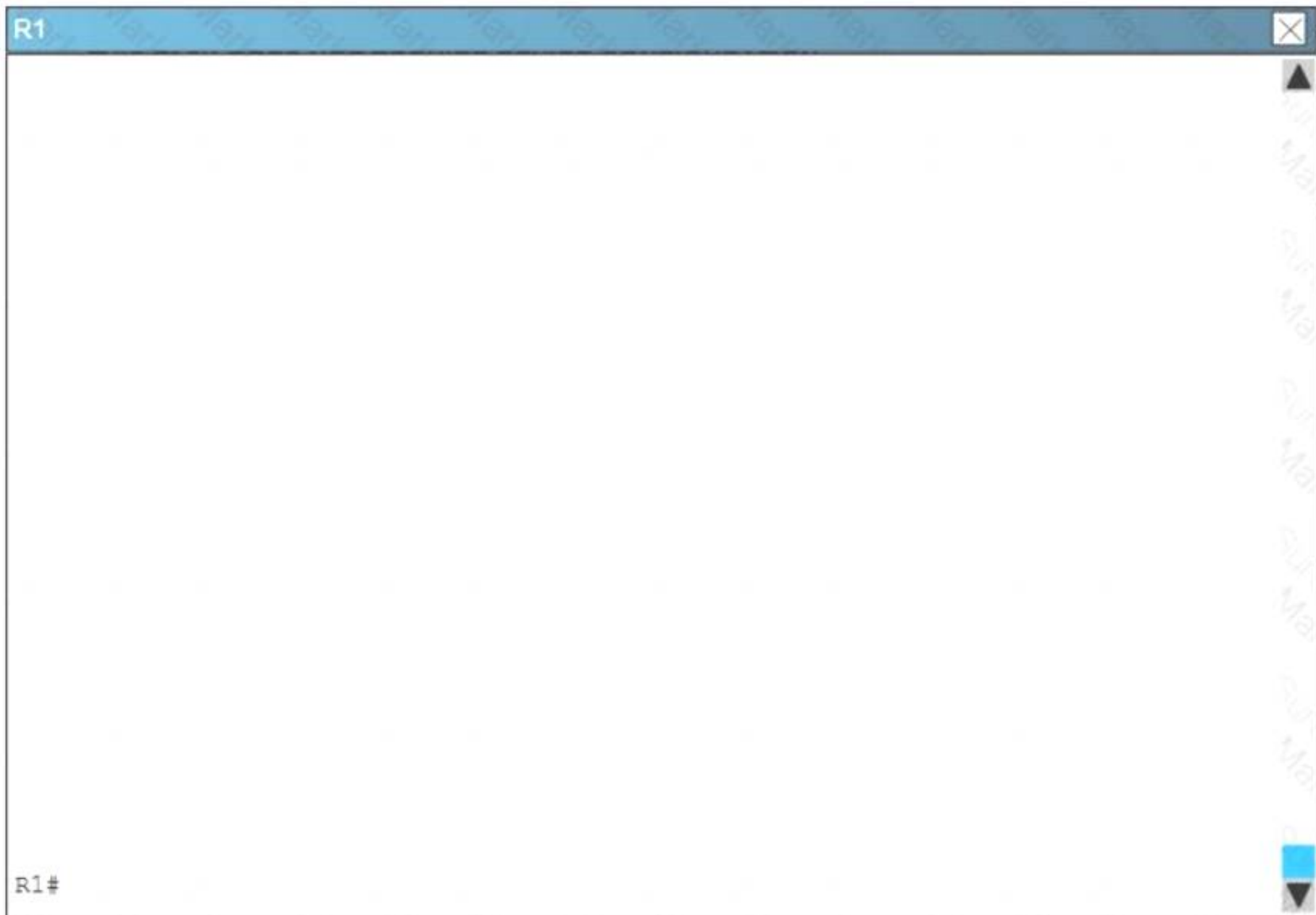
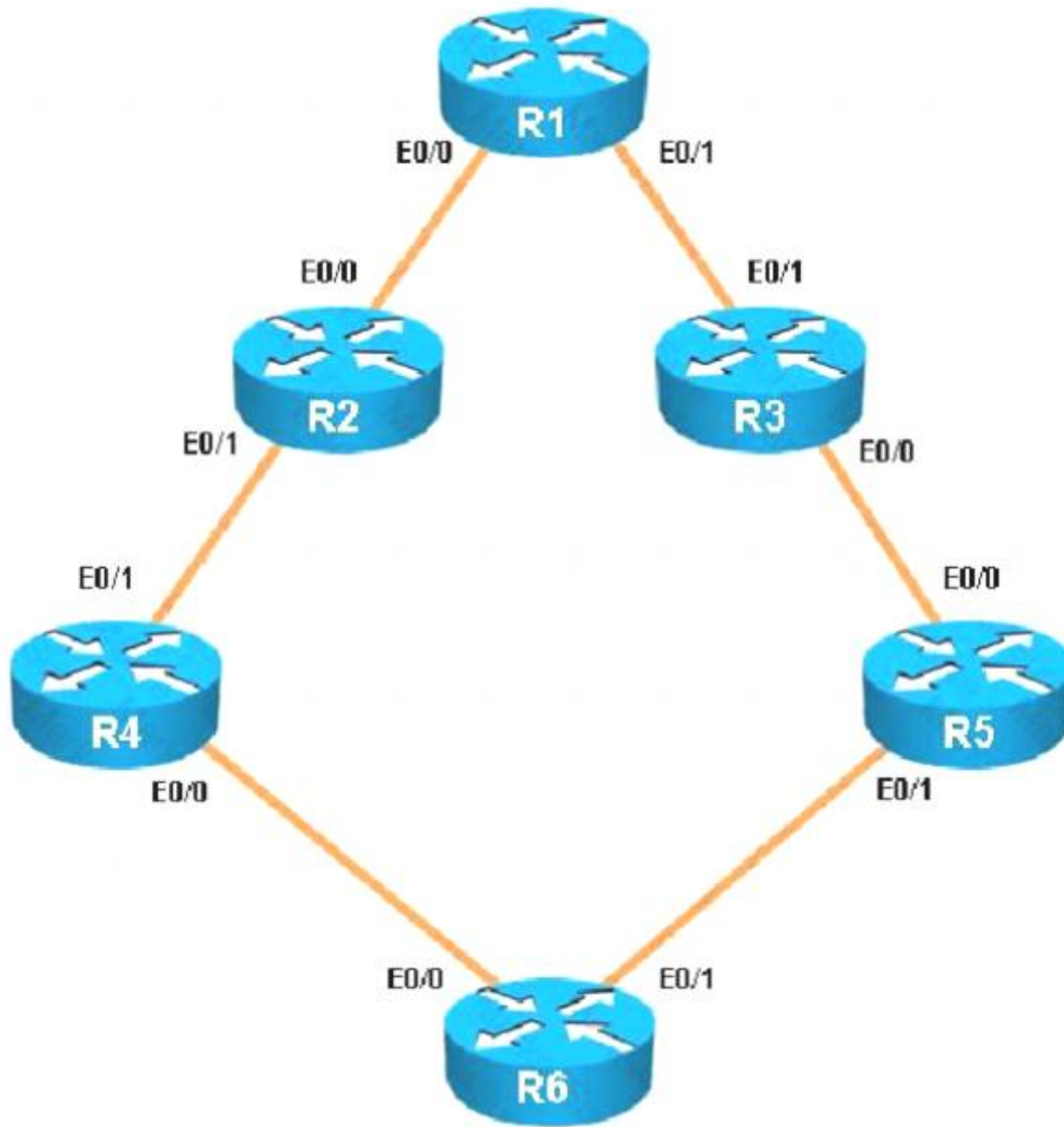
Answer: A

Explanation: R4 and R2 configs are as shown below:

--- More (164) ---

NEW QUESTION 375

Passing Certification Exams Made Easy



R2

R2#

R3

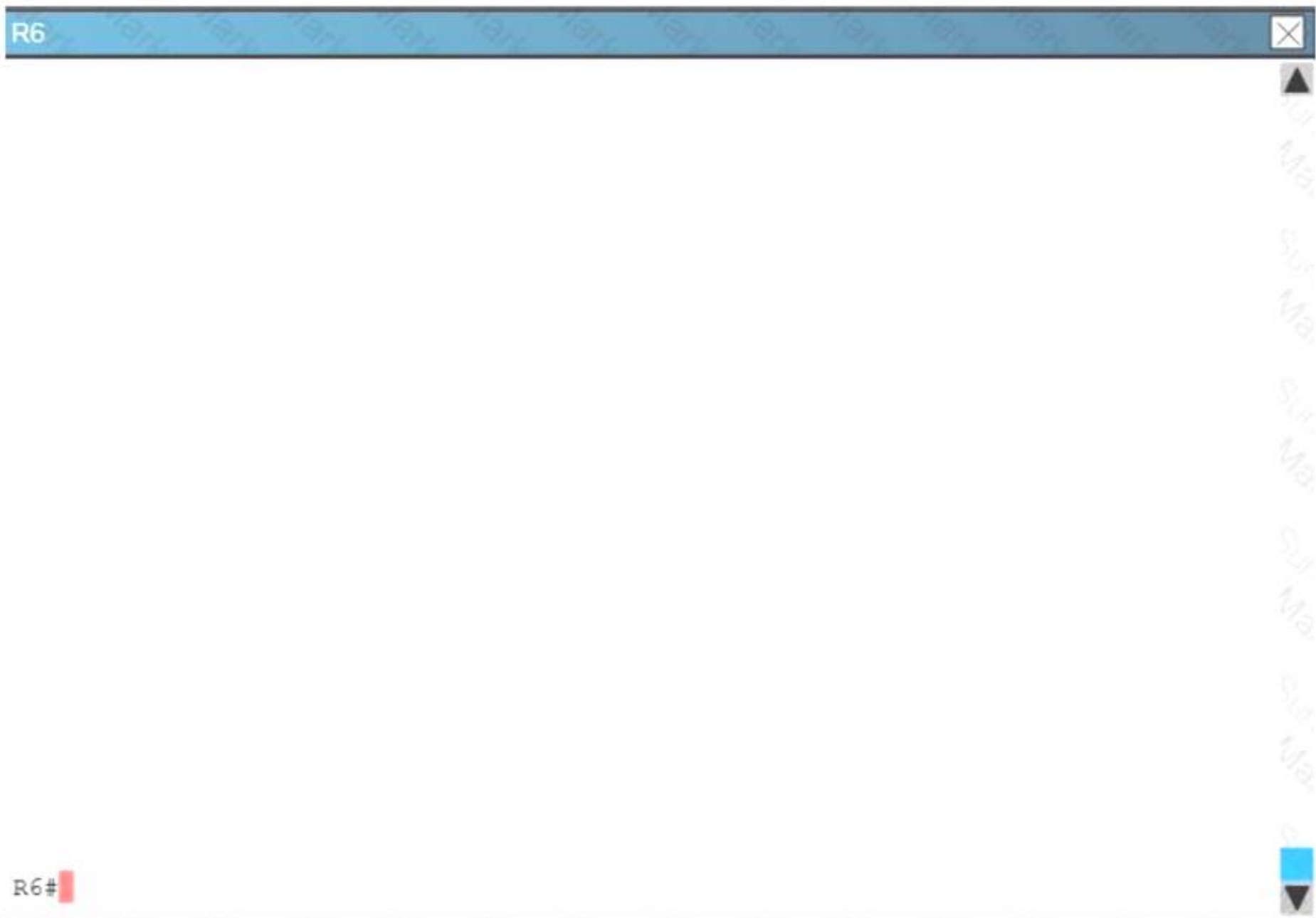
R3#

R4

R4#

R5

R5#



What is the advertised distance for the 192.168.46.0 network on R1?

- A. 333056
- B. 1938688
- C. 1810944
- D. 307456

Answer: A

NEW QUESTION 376

Which of the following situations results in a routing loop

- A. when you implement noncontiguous IP routing blocks
- B. when you have a single point of redistribution
- C. when you have multiple points of redistribution
- D. when you use NAT translation on the edge of your network
- E. when you implement contiguous IP routing blocks

Answer: C

NEW QUESTION 380

Which two statements are examples of the difference between IPV4 and IPV6 EIGRP? (Choose two)

- A. Network command is not used in IPv6
- B. DUAL is used for route calculations
- C. IPv6 keyword is used in many EIGRP commands
- D. DUAL is not used for route calculations
- E. Network command is used in IPv6

Answer: AC

NEW QUESTION 384

Users were moved from the local DHCP server to the remote corporate DHCP server. After the move, none of the users were able to use the network. Which two issues will prevent this setup from working properly? (Choose two)

- A. The broadcast domain is too large for proper DHCP propagation
- B. The DHCP server IP address configuration is missing locally
- C. The route to the new DHCP server is missing
- D. Auto-QoS is blocking DHCP traffic.
- E. 802.tX is blocking DHCP traffic

Answer: BC

NEW QUESTION 389

What is the administrative distance of an EIGRP summary route?

- A. 90
- B. 5
- C. 1
- D. 170

Answer: B

NEW QUESTION 391

Which two statements about route targets that are configured with VRF-Lite are true? (Choose two)

- A. Route targets uniquely identify the customer routing table
- B. Route targets control the import and export of routes into a customer routing table
- C. Route targets are supported only when BGP is configured
- D. When IS-IS is configured, route targets identify the circuit level in which the customer resides
- E. When BGP is configured, route targets are transmitted as BGP standard communities
- F. Route targets allow customers to be assigned overlapping addresses

Answer: BC

NEW QUESTION 392

Which type of information is displayed when a network engineer executes the show track 1 command on the router?

- A. information about tracking list
- B. information about the IP route track table
- C. time to next poll for track object 1
- D. tracking information statistics

Answer: A

NEW QUESTION 393

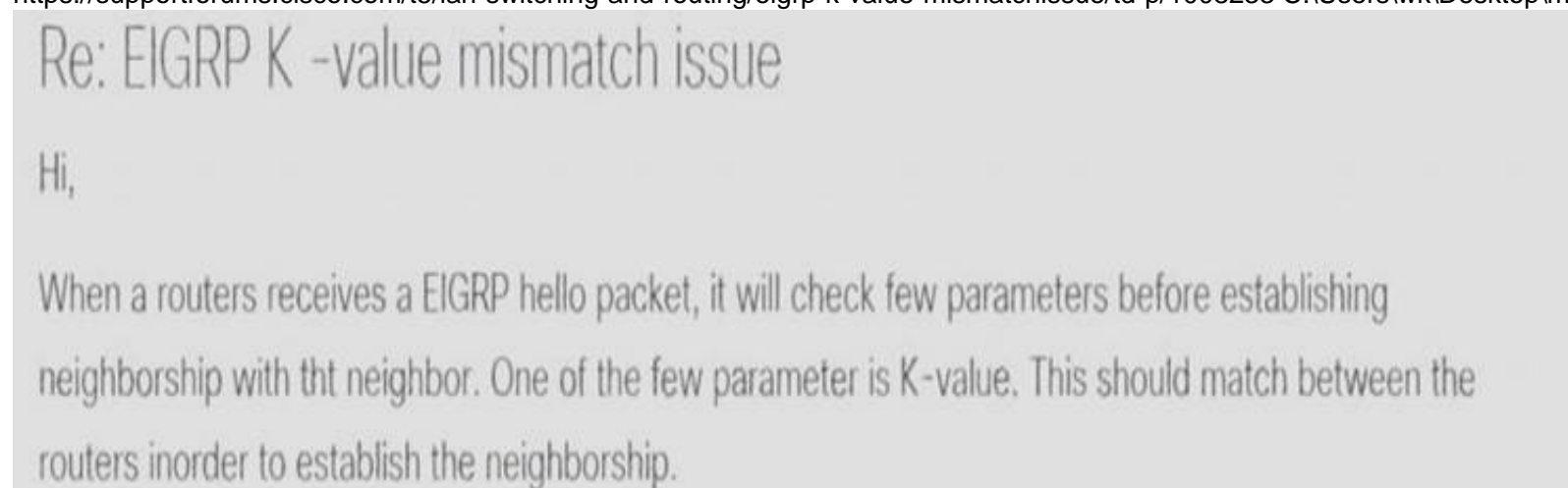
What happens when two EIGRP peers have mismatched K values?

- A. The two devices are unable to correctly perform equal-cost routing
- B. The two devices fail to perform EIGRP graceful shutdown when one device goes down
- C. The two devices fail to form an adjacency
- D. The two devices are unable to correctly perform unequal-cost load balancing

Answer: C

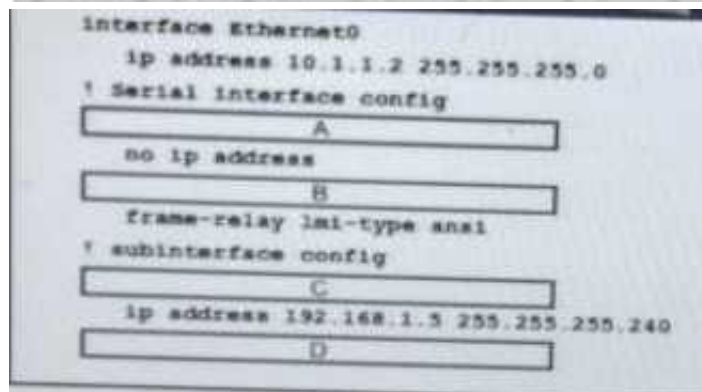
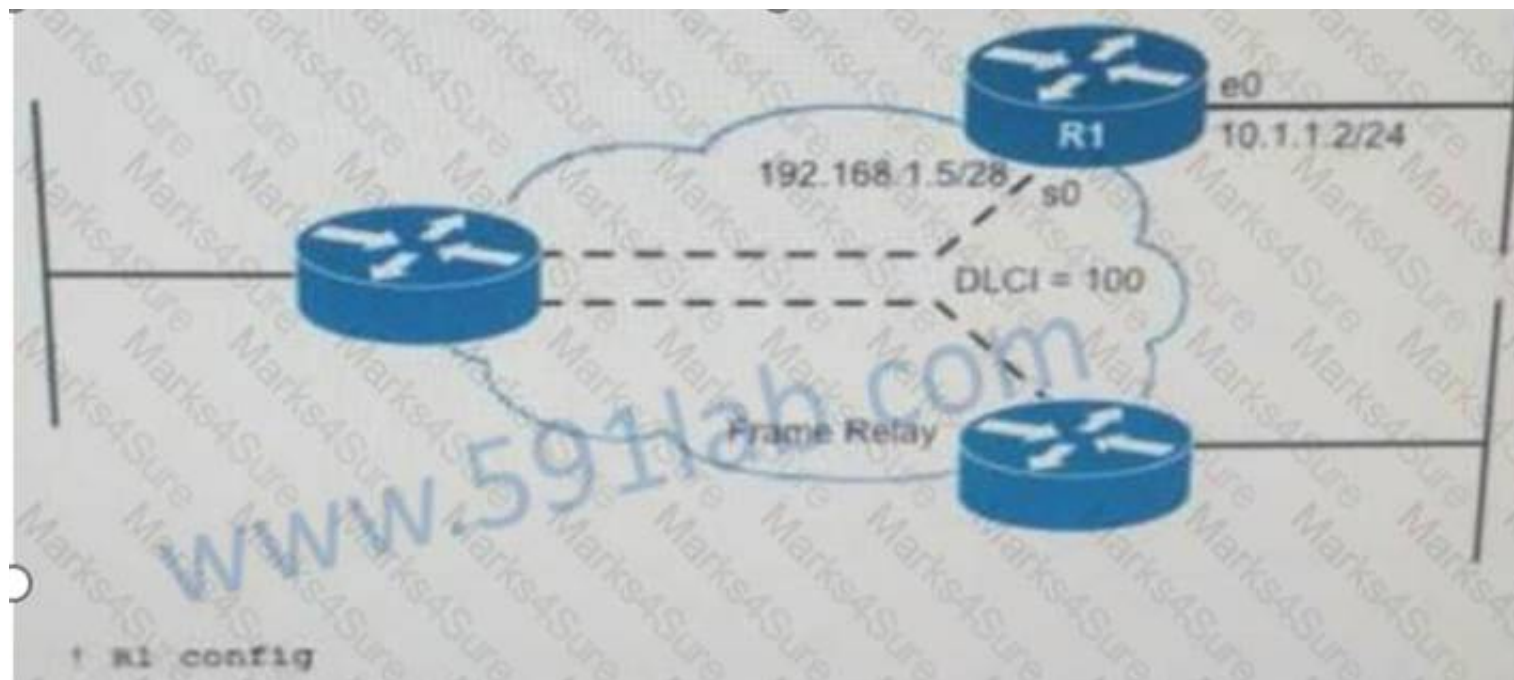
Explanation: <http://www.ciscopress.com/articles/article.asp?p=27839>

<https://supportforums.cisco.com/t5/lan-switching-and-routing/eigrp-k-value-mismatchissue/td-p/1008233> C:\Users\wk\Desktop\mudassar\Untitled.jpg



NEW QUESTION 394

Refer to the exhibit.



You are configuring the R1 Serial0 interface for a multipoint connection. Drag and drop the required configuration statements from the left onto the .corresponding locations from the diagram on the right.

encapsulation frame-relay

encapsulation ppp

frame-relay map ip 192.168.1.1 100 broadcast

frame-relay interface-dlci 100

interface Serial0

interface Serial0 1 multipoint

A

B

C

D

Answer:

Explanation:

encapsulation frame-relay

encapsulation ppp

frame-relay map ip 192.168.1.1 100 broadcast

frame-relay interface-dlci 100

interface Serial0

interface Serial0 1 multipoint

interface Serial0

encapsulation frame-relay

interface Serial0 1 multipoint

frame-relay map ip 192.168.1.1 100 broadcast

NEW QUESTION 395

What show command is used here?


```
TCB Local Address Foreign Address (state)
6523A4FC 10.1.25.3.11000 10.1.25.3.23 ESTAB
65239A84 10.1.25.3.23 10.1.25.3.11000 ESTAB
653FCBBC *.1723 *.* LISTEN
```

- A. show tcp brief
- B. show tcp brief all
- C. show tcp brief numeric
- D. show tcp brief ip

Answer: C

NEW QUESTION 400

Which two debug commands can you use to view issues with CHAP and PAP authentication? (Choose two.)

- A. DebugTACACS
- B. Debug radius
- C. Debug AAA authentication
- D. Debug PPP negotiation
- E. Debug PPPauthentication

Answer: DE

NEW QUESTION 402

Which location is traffic from IP SLAs?

- A. core edge
- B. access edge
- C. WAN edge
- D. Distribution edge
- E. User edge

Answer: C

NEW QUESTION 405

A network engineer executes the show IP Cache flow command, Which two types of information are displayed in the report that is generated? (Choose two.)

- A. flow export statistics
- B. SMLS flow traffic
- C. flow samples for specific protocols
- D. top talkers
- E. IP packet distribution

Answer: AC

NEW QUESTION 408

You have implemented mutual route redistribution between OSPF and EIGRP on a border router.

When checking the routing table on one of the OSPF routers within the OSPF routing domain, you are seeing some, but not all of the expected routes. Which two things should you verify to troubleshoot this problem? (Choose two.)

????????????

- A. The border router is using a proper seed metric for OSPF.
- B. The border router is using a proper seed metric for EIGRP.
- C. The administrative distance is set for OSPF and EIGRP
- D. The missing EIGRP routes are present in the routing table of the border router
- E. The subnet keyword on the border router in the redistribute EIGRP command

Answer: DE

NEW QUESTION 412

What to configure on routes if TACACS+ authentication fails? (Choose two)

- A. Configure local username and password
- B. Include 'local' keyword in AAA config

Answer: AB

NEW QUESTION 414

Which two actions are common methods for migrating a network from one network protocol to another? (choose two)

- A. Channing the relative administrative distance of the two routing protocols.
- B. Channing the network Ip address and bringing up the addresses using the new routing protocol
- C. removing the currency protocol and implementing the new routing protocol
- D. redistributing from the current routing protocol to the new routing protocol
- E. disabling IP routing globally and implement the new routing protocol

Answer: BD

NEW QUESTION 415

Drag and drop the ACL types from the left onto the correct description on the right.

dynamic	ACL numbered from 1300 through 1999
extended	ACL that is applied to traffic only during specifically defined periods
reflexive	ACL that must be defined with a named ACL
standard	ACL that uses Telnet for authentication
time-based	ACL type that should be placed closet to the traffic source

Answer:

Explanation:

dynamic	standard
extended	time-based
reflexive	reflexive
standard	dynamic
time-based	extended

NEW QUESTION 416

Which feature or technology is supported with stateful NAT64?

- A. FTP and ICMP on an application layer gateway
- B. VFR
- C. IP multicast
- D. NAT44 and NAT64 on the same interface

Answer: B

NEW QUESTION 419

Which types of LSAs are present in the stub area?

- A. LSA type 1 and 2
- B. LSA type 1, 2, 3, 4, and 5
- C. LSA type 1, 2, and 3

D. LSA type 3 and 5

Answer: C

NEW QUESTION 421

What is the maximum number of hops on a router that RIPng advertises as reachable?

- A. 15
- B. 30
- C. 99
- D. 255

Answer: A

NEW QUESTION 423

Which two statements about OSPFv3 are true?(choose two)

- A. The router ID is configured as an IPv6 address.
- B. It uses loopback IPv6 addresses to form neighbor relationships.
- C. The router ID is configured as an IPv4 address.
- D. It uses LSA type 6 for intra-area prefixes.
- E. It is backwards-compatible with OSPFv2 through the use of sham link.
- F. It uses link-local addresses to form neighbor relationships.

Answer: CF

NEW QUESTION 426

Which is the minimum privilege level to allow a user to execute all user-level commands but prohibits enable-level commands by default?

- A. level 0
- B. level 1
- C. level 14
- D. level 15
- E. level 16

Answer: B

NEW QUESTION 429

Which two packet type can an EIGRP router send when a route goes into the Active state?(choose two)

- A. reply
- B. request
- C. hello
- D. update
- E. query

Answer: AE

Explanation: <https://www.cisco.com/c/en/us/support/docs/ip/enhanced-interior-gateway-routing-protocol/eigrp/13669-1.html#p>
C:\Users\wk\Desktop\mudassar\Untitled.jpg

this case, it is unicast back to the successor that originated the query. Replies are always sent in response to queries to indicate to the originator that it does not need to go into Active state because it has feasible successors. Replies are unicast to the originator of the query. Both queries and replies are transmitted reliably.

- The subnet or network of the source IP address is on the same subnet or network of the next-hop IP address of the routed packet.
- The datagram is not source-routed.
- The kernel is configured to send redirects. (By default, Cisco routers send ICMP redirects. The interface subcommand `no ip redirects` can be used to disable ICMP redirects.)

NEW QUESTION 432

Which LSA type in OSPFv3 is used for link-local u

- A. Link LSA type 5
- B. Link LSA type 8
- C. Link LSA type 6
- D. Link LSA type 4

Answer: B

NEW QUESTION 436

What is the optimal location from which to execute a debug command that produces an excessive amount of information?

- A. vty lines
- B. SNMP commands
- C. A console port
- D. An AUX port

Answer: A

NEW QUESTION 437

Which two tasks must you perform to configure a BGP peer group?(Choose two)

- A. Configure the soft-update value
- B. Activate the default route
- C. Set the advertisement Interva
- D. Activate each neighbor
- E. Assign neighbors to the peer group

Answer: DE

NEW QUESTION 441

Which three restrictions apply to OSPF stub areas? (Choose three.)

- A. No virtual links are allowed.
- B. The area cannot be a backbone area.
- C. Redistribution is not allowed unless the packet is changed to a type 7 packet
- D. The area has no more than 10 routers.
- E. No autonomous system border routers are allowed.
- F. Interarea routes are suppressed.

Answer: ABE

NEW QUESTION 443

A network engineer is troubleshooting connectivity issues with a directly connected RIPv6 neighbor. Which command should directly connected RIPv6 neighbor adjacencies only?

- A. router# show ipv6 rip next-hops
- B. router# show ip rip neighbors
- C. router# show ipv6 routers
- D. router# show ipv6 rip database

Answer: A

NEW QUESTION 444

What does the following access list, which is applied on the external interface FastEthernet 1/0 of the perimeter router, accomplish?

```
router (config)#access-list 101 deny ip 10.0.0.0 0.255.255.255 any log
router (config)#access-list 101 deny ip 192.168.0.0 0.0.255.255 any log
router (config)#access-list 101 deny ip 172.16.0.0 0.15.255.255 any log
router (config)#access-list 101 permit ip any any
router (config)#interface fastEthernet 1/0
router (config-if)#ip access-group 101 in
```

- A. It prevents private internal addresses to be accessed directly from outside
- B. It filters incoming traffic from private address ranges 10.0.0.0-10.0.0.255, 172.16.0.0-172.31.255.255, 192.168.0.0-192.168.255.255 and logs any intrusion attempts
- C. It prevents the internal network from being used in spoofed denial of service attacks and logs any exit to the Internet
- D. It filters incoming traffic from private addresses in order to prevent spoofing and logs any intrusion attempts

Answer: B

NEW QUESTION 447

Which adverse event can occur as a consequence of asymmetric routing on the network?

- A. vulnerability to a man-in-the-middle attack
- B. inadvertent HSRP active router preemption
- C. errdisabled port
- D. unicast flooding

Answer: D

NEW QUESTION 451

Which STP feature can reduce TCNs on ports that are connected to end devices?

- A. BPDU guard
- B. Root guard
- C. PortFast
- D. BackboneFast

Answer: C

NEW QUESTION 456

Which two different configurations can you apply to a device to block incoming SSH access? (Choose two.)

- A.

```
ipv6 access-list VTY-ACCESS-IN
sequence 10 deny tcp any any eq 22
sequence 20 permit ipv6 any any
interface Ethernet0/0
ip traffic-filter VTY-ACCESS-IN out
```
- B.

```
ipv6 access-list VTY-ACCESS-IN
sequence 10 deny tcp any any eq 22
sequence 20 permit ipv6 any any
interface Ethernet0/0
ip traffic-filter VTY-ACCESS-IN in
```
- C.

```
ipv6 access-list VTY-ACCESS-IN
sequence 10 deny tcp any any eq 22
sequence 20 permit ipv6 any any
line vty 0 15
ip access-class VTY-ACCESS-IN in
```
- D.

```
ipv6 access-list VTY-ACCESS-IN
sequence 10 deny tcp any any eq 22
sequence 20 permit ipv6 any any
line vty 0 15
ip access-list VTY-ACCESS-IN out
```
- E.

```
ipv6 access-list VTY-ACCESS-IN
sequence 10 deny tcp any any eq 22
sequence 20 permit ipv6 any any
interface Ethernet0/0
ip traffic-filter VTY-ACCESS-IN out
```

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

Answer: BC

NEW QUESTION 457

Engineer has to enable RIP on a link. Where he will issue the command?

- A. Ipv6
- B. Global

- C. Router sub command
- D. Interface sub command

Answer: C

NEW QUESTION 458

Which two statements about EVN are true? (Choose two.)

- A. It supports IPv6 traffic.
- B. It can support up to 16 VNs.
- C. It uses redistribution to share routes between VNs.
- D. It supports SSM only.
- E. A configuration can be based on an existing VRF configuration.

Answer: CE

Explanation: https://www.cisco.com/c/en/us/products/collateral/ios-nx-os-software/layer-3-vpns/3vpn/whitepaper_c11-63876
C:\Users\wk\Desktop\mudassar\Untitled.jpg

Conclusion

Network virtualization solution EVN:

- Provides a pure IP alternative to MPLS in enterprise networks for up to 32 VNs
- Uses existing enterprise design/architecture/protocols
- Uses existing technology to increase the effectiveness of VRFs
- Provides either an IGP (OSPF, EIGRP) only or IGP/EGP-based alternative Reintroduces familiar concepts for access and trunks to Layer 3
- Can be deployed with traditional MPLS VPNs or MPLS VPNs over mGRE
- Can coexist with Multi-VRF deployments
- Supports non-IP and IPv6 traffic through the EVN global table
- Supports PIM and IGMP with SM and SSM modes for mVPN
- Supports shared services using route replication
- Includes enhanced troubleshooting and usability tools:
 - routing context, traceroute, debug condition, cisco-vrf-mib, and simplified VRF-aware SNMP configuration

NEW QUESTION 461

A network engineer has configured an IOS router to synchronize its clock with a Windows server. After several minutes, the network engineer notices that the local time on the router does not match the time on the Windows server What is the reason for this?

- A. Either a firewall between the two devices or an ACL on the router is blocking TCP port 958
- B. Either a firewall between the two devices or an ACL on the router is blocking UDP port 958
- C. Either a firewall between the two devices or an ACL on the router is blocking UDP port 123
- D. Either a firewall between the two devices or an ACL on the router is blocking TCP port 123

Answer: C

NEW QUESTION 462

Drag and drop the statement about device security from the left on the correct features on the right.

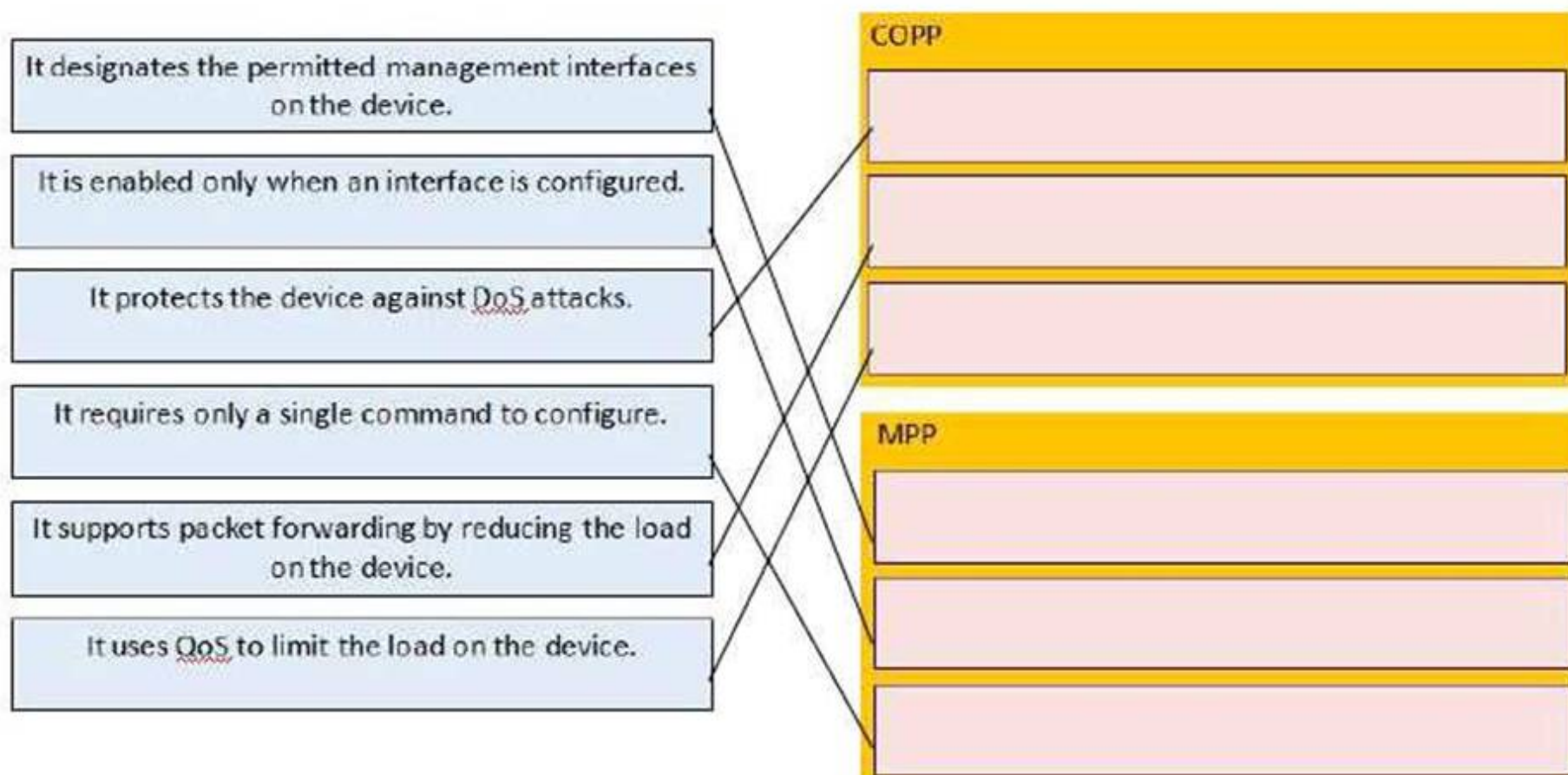
- It designates the permitted management interfaces on the device.
- It is enabled only when an interface is configured.
- It protects the device against DoS attacks.
- It requires only a single command to configure.
- It supports packet forwarding by reducing the load on the device.
- It uses QoS to limit the load on the device.

COPP

MPP

Answer:

Explanation:



NEW QUESTION 465

Which two statements about the enable secret and enable password commands are true?(Choose two)

- A. I both commands are missing from the global configuration, vty lines use the console password
- B. The enable secret command overrides enable password
- C. The enable password command has a stronger encryption algorithm than enable secret
- D. The enable secret command is backwards-compatible with more versions of IOS
- E. The enable secret and enable password commands must be used together

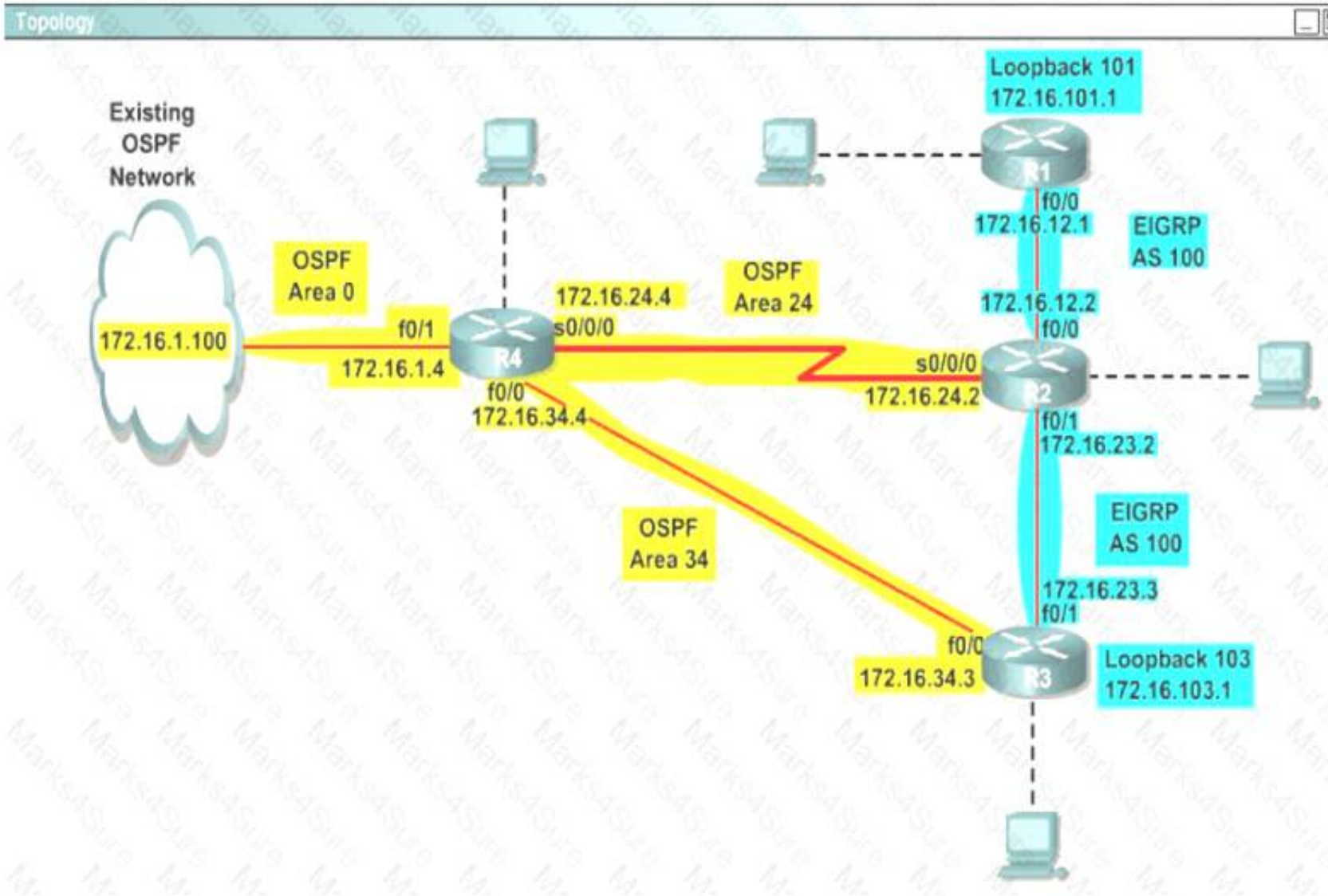
Answer: AB

NEW QUESTION 467

You are a network engineer with ROUTE.com, a small IT company. They have recently merged two organizations and now need to merge their networks as shown in the topology exhibit. One network is using OSPF as its IGP and the other is using EIGRP as its IGP. R4 has been added to the existing OSPF network to provide the interconnect between the OSPF and EIGRP networks. Two links have been added that will provide redundancy. The network requirements state that you must be able to ping and telnet from loopback 101 on R1 to the OPSF domain test address of 172.16.1.100. All traffic must use the shortest path that provides the greatest bandwidth. The redundant paths from the OSPF network to the EIGRP network must be available in case of

a link failure. No static or default routing is allowed in either network.

A previous network engineer has started the merger implementation and has successfully assigned and verified all IP addressing and basic IGP routing. You have been tasked with completing the implementation and ensuring that the network requirements are met. You may not remove or change any of the configuration commands currently on any of the routers. You may add new commands or change default values.



Answer:

Explanation: First we need to find out 5 parameters (Bandwidth, Delay, Reliability, Load, MTU) of the s0/0/0 interface (the interface of R2 connected to R4) for redistribution:

R2#show interface s0/0/0

Write down these 5 parameters, notice that we have to divide the Delay by 10 because the metric unit is in tens of microsecond. For example, we get Bandwidth=1544 Kbit, Delay=20000 us, Reliability=255, Load=1, MTU=1500 bytes then we would redistribute as follows:

R2#config terminal R2(config)# router ospf 1

R2(config-router)# redistribute eigrp 100 metric-type 1 subnets R2(config-router)#exit

R2(config-router)#router eigrp 100

R2(config-router)#redistribute ospf 1 metric 1544 2000 255 1 1500

Note: In fact, these parameters are just used for reference and we can use other parameters with no problem. If the delay is 20000us then we need to divide it by 10, that is 20000 / 10 = 2000

For R3 we use the show interface fa0/0 to get 5 parameters too

R3#show interface fa0/0

For example we get Bandwidth=10000 Kbit, Delay=1000 us, Reliability=255, Load=1, MTU=1500 bytes

R3#config terminal R3(config)#router ospf 1

R3(config-router)#redistribute eigrp 100 metric-type 1 subnets R3(config-router)#exit

R3(config-router)#router eigrp 100

R3(config-router)#redistribute ospf 1 metric 10000 100 255 1 1500

Finally you should try to "show ip route" to see the 172.16.100.1 network (the network behind R4) in the routing table of R1 and make a ping from R1 to this network.

Note: If the link between R2 and R3 is FastEthernet link, we must put the command below under EIGRP process to make traffic from R1 to go through R3 (R1 -> R2 -> R3 -> R4), which is better than R1 -> R2 -> R4.

R2(config-router)# distance eigrp 90 105

This command sets the Administrative Distance of all EIGRP internal routes to 90 and all EIGRP external routes to 105, which is smaller than the Administrative Distance of OSPF (110) -> the link between R2 & R3 will be preferred to the serial link between R2 & R4.

Note: The actual OPSF and EIGRP process numbers may change in the actual exam so be sure to use the actual correct values, but the overall solution is the same.

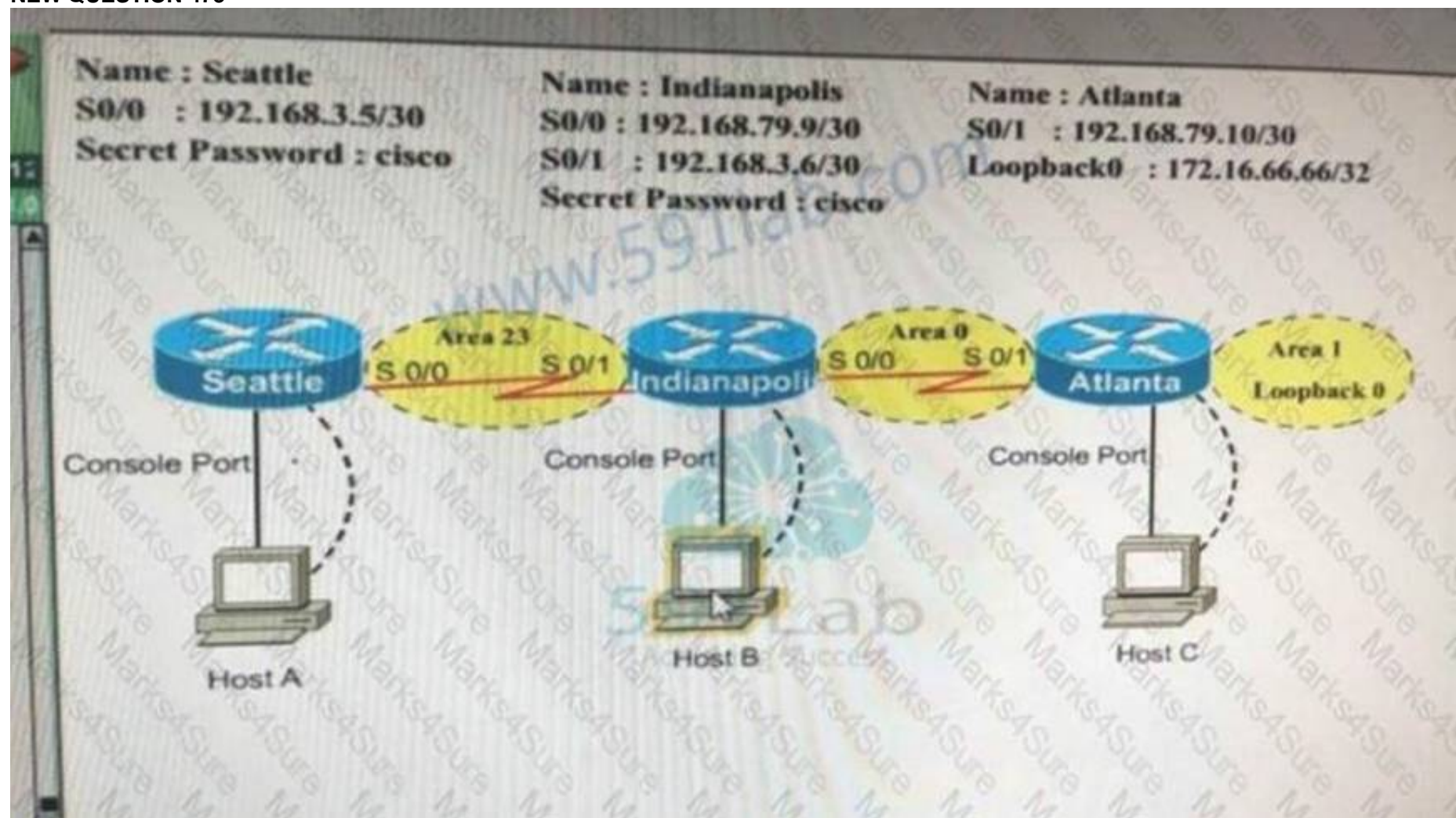
NEW QUESTION 471

Which password takes precedence if you configure multiple passwords for Telnet connections to a Cisco IOS device?

- A. console line password
- B. enable secret password
- C. enable password
- D. aux line
- E. password

Answer: B

NEW QUESTION 473



ROUTE com's corporate implementation guidelines require:

- The OSPF process ID for all routers must be 37.
- The routing protocol for each interface must be enabled under the routing process.
- The routing protocol must be enabled for each interface using the most specific wildcard mask possible.
- The serial link between Seattle and Indianapolis must be in OSPF area 23.
- OSPF area 23 must not receive any inter-area or external routes.

Network Information
Seattle

Name : Seattle
S0/0 : 192.168.3.5/30
Secret Password : cisco

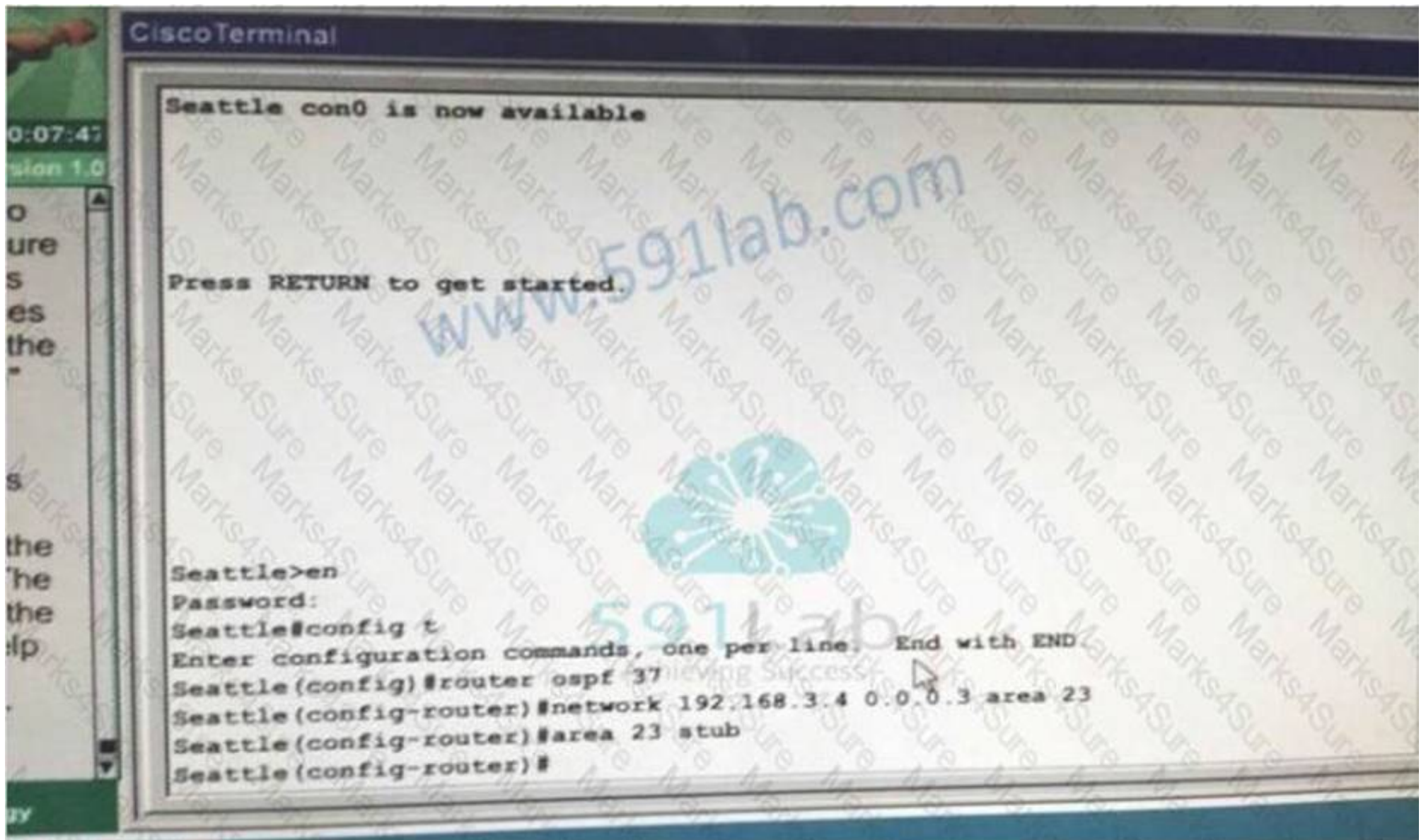
Name : Indianapolis
S0/0 : 192.168.79.9/30
S0/1 : 192.168.3.6/30
Secret Password : cisco

Name : Atlanta
S0/1 : 192.168.79.10/30
Loopback0 : 172.16.66.66/32

The diagram shows three routers connected in a line. Seattle is connected to Indianapolis via a serial link in Area 23. Indianapolis is connected to Atlanta via a serial link in Area 0. Atlanta has a loopback interface in Area 1. Each router is connected to a host (Host A, Host B, Host C) via a console port.

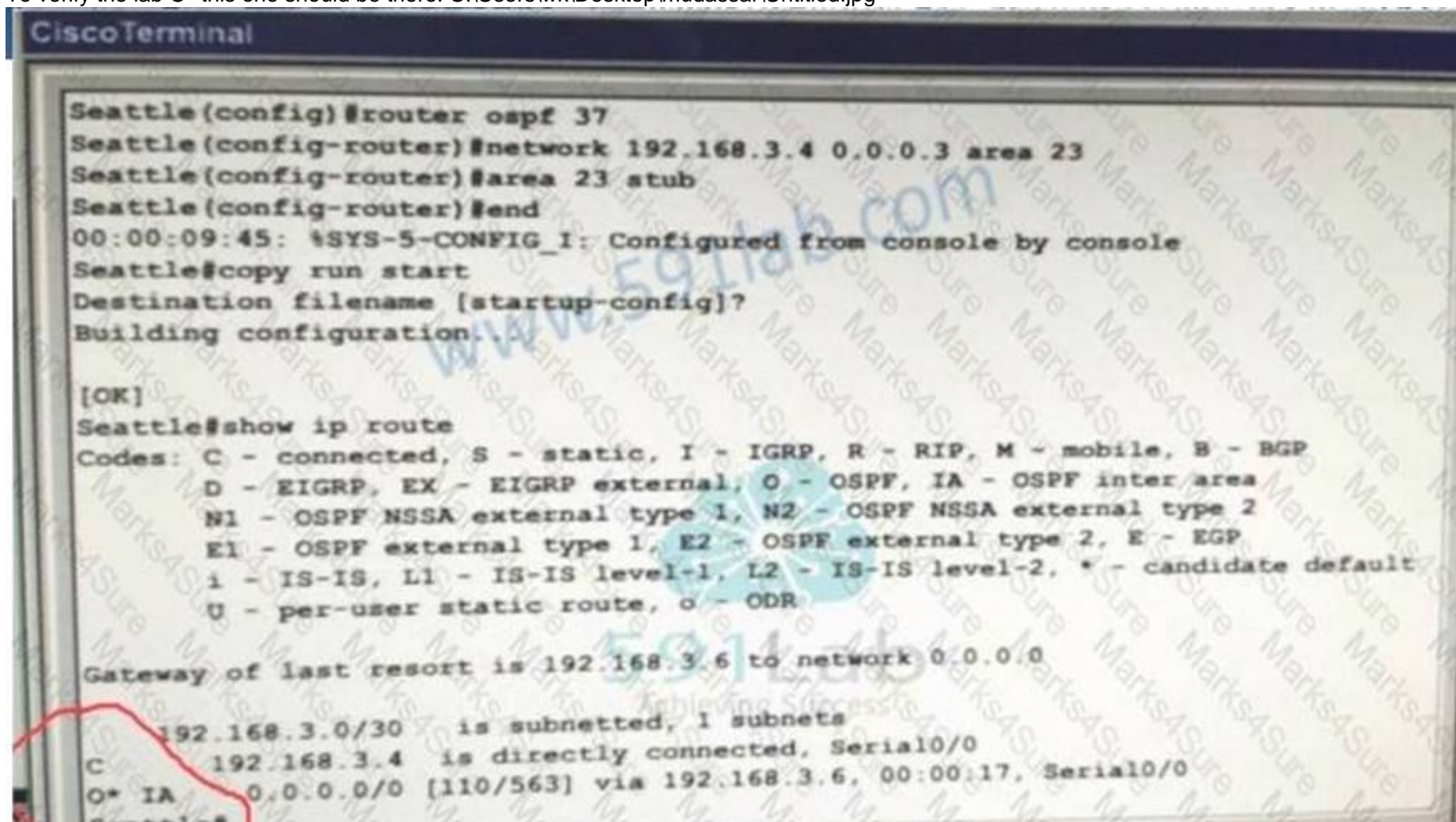
Answer:

Explanation: Always remember the Process id and area , in this question process id is 37a nd OSPF area is 23 Process id 37 area 23 Indianapolis
at first go to HOST A and write this configuration Seattle(config)#router ospf 37
Seattle (config-router)#network 192.168.3.4 0.0.0.3 area 23 Seattle (config-router)#area 23 stub
For Host B
Indianapoll #configure terminal Indianapolis (config)#router ospf 37
Indianapoll (config-router)#network 192.168.3.4 0.0.0.3 area 23
Indianapoll (config-router)#area 23 stub no-summary C:\Users\wk\Desktop\mudassar\Untitled.jpg



Show ip route in host A

To verify the lab O* this one should be there. C:\Users\wk\Desktop\mudassar\Untitled.jpg



NEW QUESTION 475

Which statement is true about an edge interface in relation to the Cisco Easy Virtual Network?

- A. An edge interface is used to differentiate VRF instances.
- B. An edge interface connects to end devices such as hosts and servers that are VRF-aware.
- C. An edge interface connects a user device to the EVN while defining the EVN boundaries.
- D. An edge interface is configured using the vnet trunk command under the switched virtual interface.

Answer: C

NEW QUESTION 480

Which two OSPF router types can perform summarization in an OSPF network?(Choose two)

- A. backbone router
- B. area border router
- C. summary router
- D. a autonomous system boundary router
- E. internal router

Answer: BD

NEW QUESTION 481

A customer requests policy-based routing Packets arriving from source 209 165 200 225 should be sent to the next hop at 209 165 200 227 with the precedence bit set to priority. Packets arriving from source 209 165 200 226 should be sent to the next hop at 209 165 200 228 with the precedence bit set to critical Which configuration completes these requirements?

A customer requests policy-based routing Packets arriving from source 209 165 200 225 should be sent to the next hop at 209 165 200 227 with the precedence bit set to priority Packets arriving from source 209.165.200 226 should be sent to the next hop at 209 165 200 228 with the precedence bit set to critical. Which configuration completes these requirements?

A)

```
access-list 1 permit 209.165.200.225
access-list 2 permit 209.165.200.226
!
route-map Texas permit 10
match ip address 1
set ip precedence critical
set ip next-hop 209.165.200.227
!
route-map Texas permit 20
match ip address 2
set ip precedence priority
set ip next-hop 209.165.200.228
!
interface ethernet 1
ip policy route-map Texas
```

B)

```
access-list 1 permit 209.165.200.227
access-list 2 permit 209.165.200.228
!
route-map Texas permit 10
match ip address 1
set ip precedence priority
set ip next-hop 209.165.200.225
!
route-map Texas permit 20
match ip address 2
set ip precedence critical
set ip next-hop 209.165.200.226
!
interface ethernet 1
ip policy route-map Texas
```

C)

```
access-list 1 permit 209.165.200.225
access-list 2 permit 209.165.200.226
!
route-map Texas permit 10
match ip address 1
set ip precedence priority
set ip next-hop 209.165.200.227
!
route-map Texas permit 20
match ip address 2
set ip precedence critical
set ip next-hop 209.165.200.228
!
interface ethernet 1
ip policy route-map Texas
```

D)

```
access-list 1 permit 209.165.200.228
access-list 2 permit 209.165.200.227
!
route-map Texas permit 10
match ip address 1
set ip precedence priority
set ip next-hop 209.165.200.226
!
route-map Texas permit 20
match ip address 2
set ip precedence critical
set ip next-hop 209.165.200.225
!
interface ethernet 1
ip policy route-map Texas
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: A

NEW QUESTION 484

Which two options are benefits of BGP peer groups?(Choose two)

- A. They can optimize backdoor routes
- B. They support groups of paths
- C. A configuration change can be applied simultaneously to all peers in the peer group
- D. Each neighbor in a peer group can have different inbound BGP policies
- E. They can be updated via multicast
- F. They use soft updates to minimize bandwidth consumption

Answer: CD

NEW QUESTION 489

What is the hop count is advertised for an unreachable network by a RIP router that uses poison reverse?

- A. 16
- B. 255
- C. 15

Answer: A

NEW QUESTION 493

Which three NTP operating modes must the ntp trusted-key command be configured on for authentication to operate properly?(Choose three)

- A. client
- B. interface
- C. stratum
- D. server
- E. peer
- F. broadcast

Answer: ADF

NEW QUESTION 494

Which command prevents routes from sending routing updates through a router interface?

- A. distribute-list in
- B. passive-interface
- C. default-metric
- D. distribute-list out

Answer: B

NEW QUESTION 496

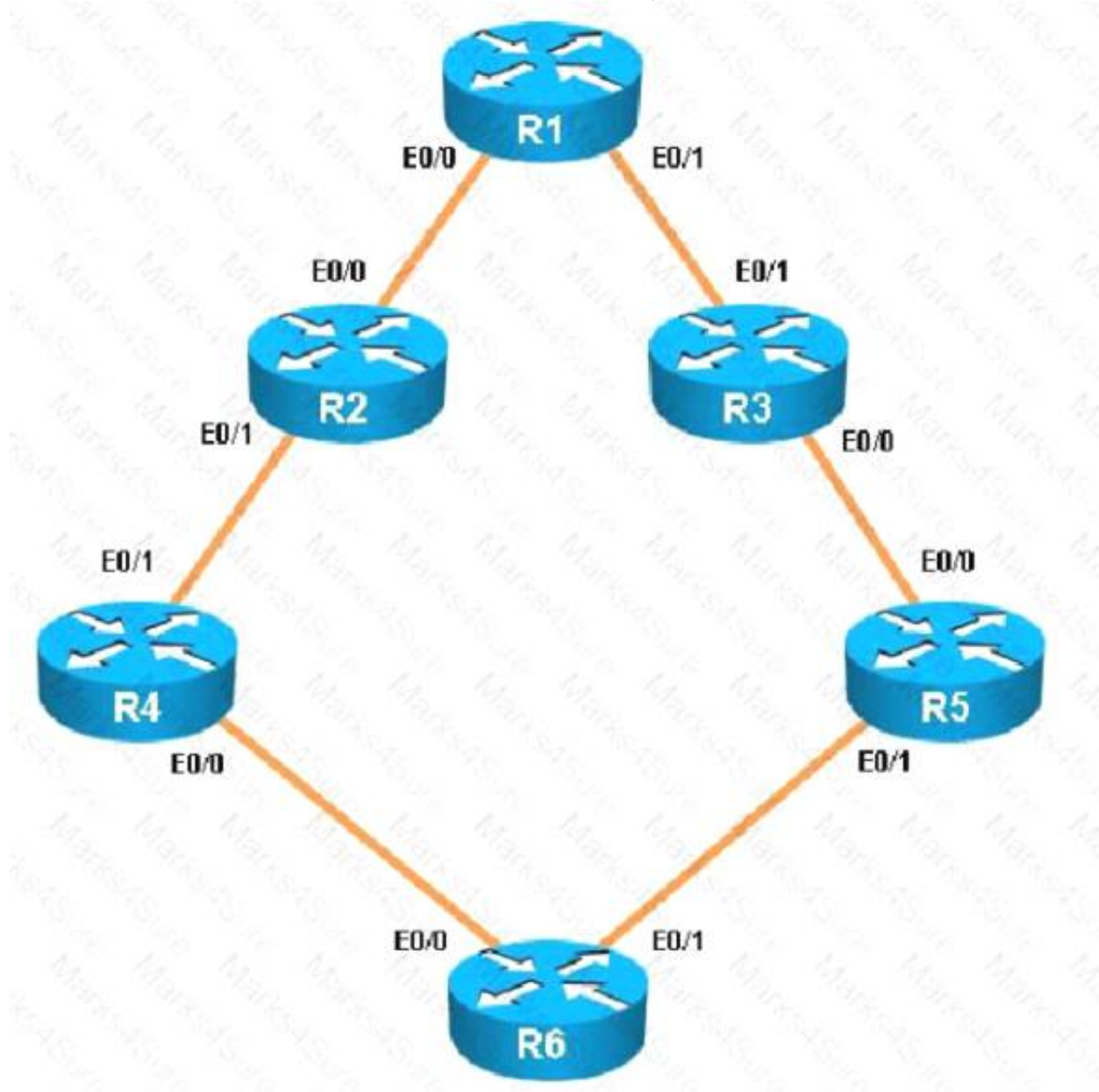
Which allowing website access between certain times?

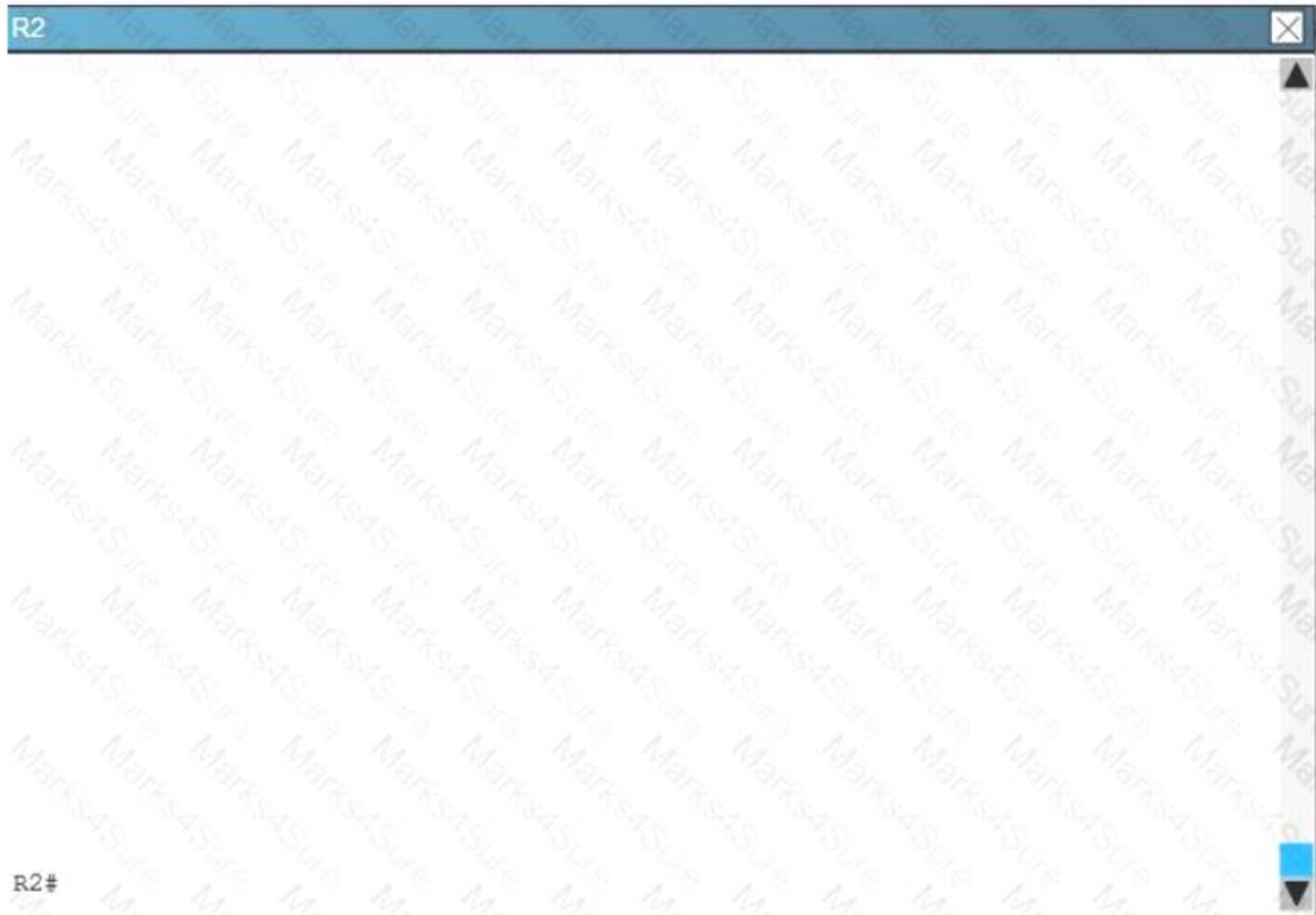
- A. Filters using Time-Based ACLs
- B. x
- C. x
- D. x

Answer: A

NEW QUESTION 499

You have been asked to evaluate how EIGRP is functioning in a customer network.



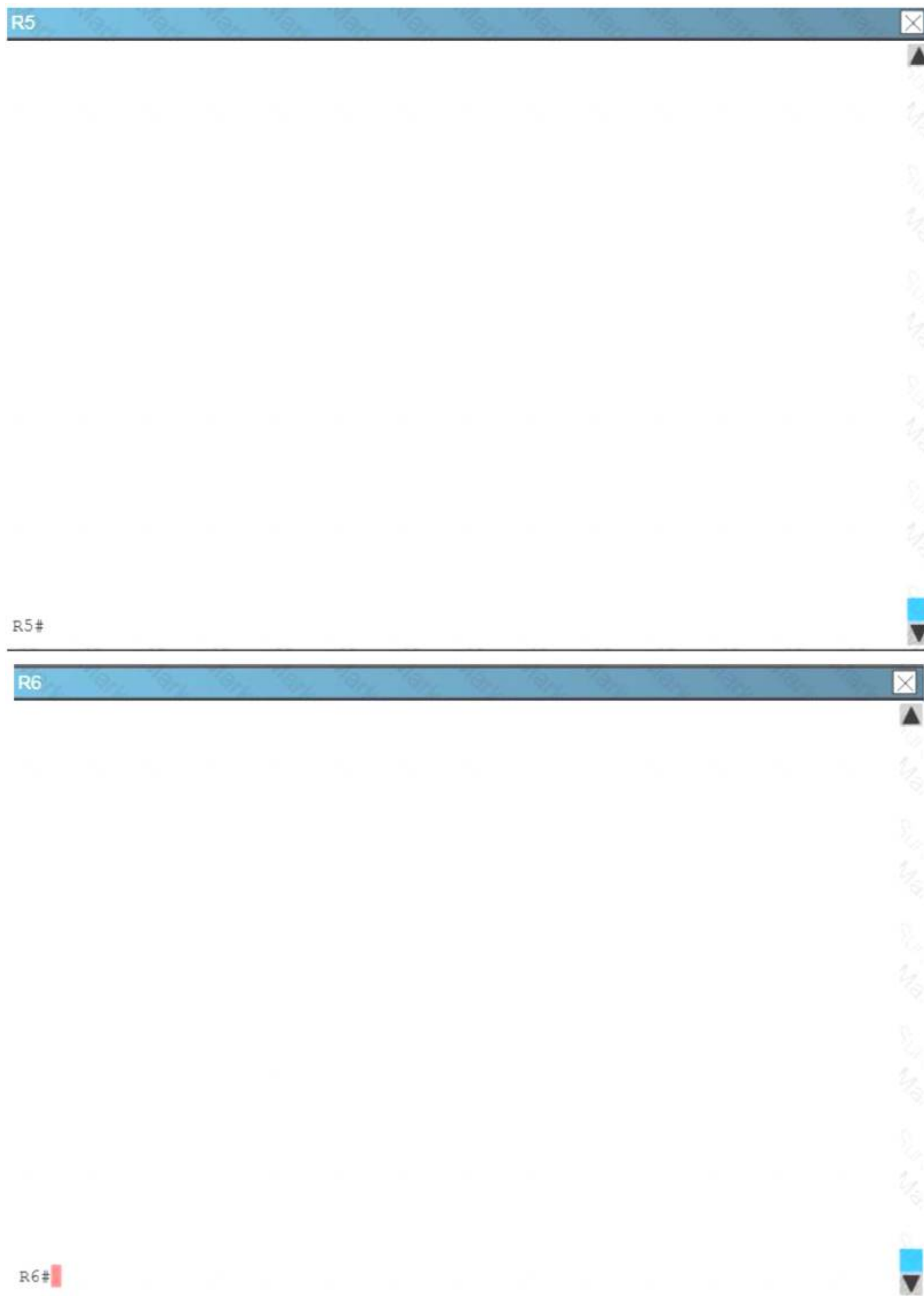


R3

R3#

R4

R4#



What percent of R1's interfaces bandwidth is EIGRP allowed to use?

- A. 10
- B. 20
- C. 30
- D. 40

Answer: B

NEW QUESTION 504

Which LSA types can exist only in an OSPF NSSA area?

- A. type 1 LSA
- B. type 3 LSA
- C. type 5 LSA
- D. type 7 LSA

Answer: D

NEW QUESTION 508

Which security feature can protect DMVPN tunnels?

- A. IPsec
- B. TACACS+
- C. RTBH
- D. RADIUS

Answer: A

NEW QUESTION 513

Drag and drop the statements about device security from the left onto the correct description on the right. Select and Place:

It designates the permitted management interfaces on the device.

It is enabled only when an interface is configured.

It protects the device against DoS attacks.

It requires only a single command to configure.

It supports packet forwarding by reducing the load on the device.

It uses QoS to limit the load on the device.

COPP

MPP

Answer:

Explanation:

It designates the permitted management interfaces on the device.

It is enabled only when an interface is configured.

It protects the device against DoS attacks.

It requires only a single command to configure.

It supports packet forwarding by reducing the load on the device.

It uses QoS to limit the load on the device.

COPP

It protects the device against DoS attacks.

It supports packet forwarding by reducing the load on the device.

It uses QoS to limit the load on the device.

MPP

It designates the permitted management interfaces on the device.

It is enabled only when an interface is configured.

It requires only a single command to configure.

NEW QUESTION 515

Drag and drop the DMVPN components from the left onto the correct descriptions on the right
 Select and Place:

hub

mGRE

NHRP

spoke

device that acts as the next-hop server

device that is usually identified with a dynamic address

protocol that allows spokes to communicate directly with one another

technology that allows one interface to support multiple tunnels

Reset

OK

Answer:

Explanation:

hub

mGRE

NHRP

spoke

hub

spoke

NHRP

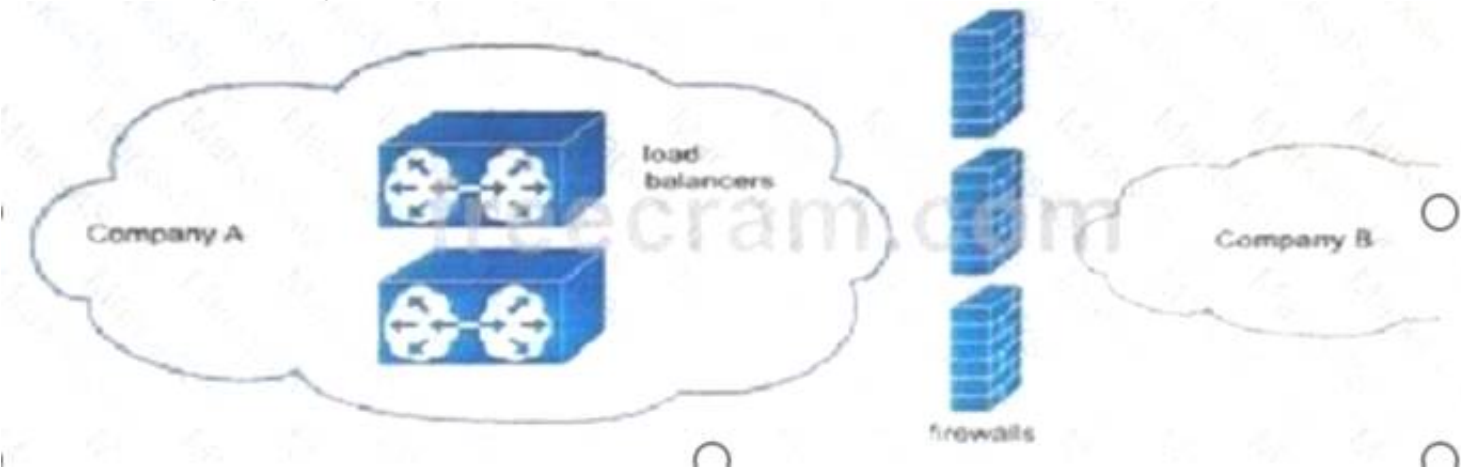
mGRE

Reset

OK

NEW QUESTION 518

Refer to the exhibit.
 Which networking challenge is the most important issue to address to enable optimal communication between the networks at Company A and Company B?



- A. IPv4 MTU
- B. IPv4 fragmentation
- C. UDP latency
- D. unicast flooding
- E. asymmetric routing

Answer: E

NEW QUESTION 519

Which two protocols can cause TCP starvation? (Choose two)

- A. SMTP
- B. TFTP
- C. SNMP
- D. FTP
- E. HTTPS

Answer: AB

NEW QUESTION 523

After reviewing the EVN configuration, a network administrator notices that a predefined BVN, which is known as "vnet global" was configured. What is the purpose of this EVN?

- A. It defines the routing scope for each particular EVN edge interface.
- B. It aggregates and carries all dot1q tagged traffic.
- C. It refers to the global routing context and corresponds to the default RIB.
- D. It safeguards the virtual network that is preconfigured to avoid mismatched routing instances.

Answer: C

NEW QUESTION 525

Drag and drop the GRE features from the left onto the correct descriptions on the right.

IPsec	clear-text password that confirms the peer connection
keepalive	configurable value that prevents an interface from sending packets that are too large for the tunnel
mGRE	technology that prevents one side of the tunnel from going down while the other stays up
MSS	technology that supports dynamic tunnel endpoints
tunnel key	encryption protocol used to secure tunnels

Answer:

Explanation:

IPsec	tunnel key
keepalive	MSS
mGRE	keepalive
MSS	mGRE
tunnel key	IPsec

NEW QUESTION 530

You have a router has some interface configured with 10Gb interface and gigabit interface. Which command you use to optimize higher BW

- A. (config)#router ospf 1(config-router)auto-cost reference-bandwidth 10000
- B. (config)#router ospf 1(config-router)auto-cost reference-bandwidth 1000
- C. (config)#int f0/0(config-int)auto-cost reference-bandwidth 1000
- D. (config)#int f0/0(config-int)auto-cost reference-bandwidth 10000

Answer: A

NEW QUESTION 533

Which statement about Stateless and Stateful IPv6 autoconfiguration are true?

- A. Both Stateless and Stateful autoconfiguration require additional setup
- B. Stateless autoconfiguration requires no additional setup, whereas Stateful autoconfiguration requires additional setup
- C. Stateless autoconfiguration requires additional setup, whereas Stateful autoconfiguration requires no additional setup
- D. Both Stateless and Stateful autoconfiguration require no additional setup

Answer: B

NEW QUESTION 534

You want to configure a device to select an OSPF-learned route as the preferred path overan EBGp-learned route Which action must you take?

- A. Increase the OSPF cost
- B. Decrease the OSPF cost
- C. Increase the oSPF administrative distance
- D. Decrease the OsPF administrative distance

Answer: D

NEW QUESTION 536

Which option is an invalid redistribute command option for redistributing routes from EIGRPintoOSPF?

- A. route map
- B. tag
- C. access list
- D. metric

Answer: C

NEW QUESTION 537

Which two commands must be used to troubleshoot high memory usage for a process?

- A. router#show memory allocating-process table
- B. router#show memory processor statistics
- C. router#show memory events
- D. router#show memory summary
- E. routertfshow memory dead

Answer: AD

NEW QUESTION 542

Which two statements about redistributing EIGRP into OSPF are true? (Choose two)

- A. The redistributed EIGRP routes appear as type 3 LSAs in the OSPF database
- B. The redistributed EIGRP routes appear as type 5 LSAs in the OSPF database
- C. The administrative distance of the redistributed routes is 170
- D. The redistributed EIGRP routes appear as OSPF external type 1
- E. The redistributed EIGRP routes as placed into an OSPF area whose area ID matches the EIGRP autonomous system number
- F. The redistributed EIGRP routes appear as OSPF external type 2 routes in the routing table

Answer: BF

NEW QUESTION 547

Which command will display all the EIGRP feasible successor routes known to a router?

- A. show ip routes
- B. show ip eigrp summary
- C. show ip eigrp topology
- D. show ip eigrp adjacencies

Answer: C

NEW QUESTION 552

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

- A. VRFs using MPLS require a trunk interface that uses EVN
- B. All EVNs within a trunk interface can share the same IP infrastructure
- C. Each EVN within a trunk interface must be configured separately
- D. Commands that are specified once under a trunk interface can be inherited by all EVNs
- E. VRF-Lite requires a trunk interface that uses EVN

Answer: BD

NEW QUESTION 553

You are configuring a Microsoft client to call a PPP server using CHAP. Only the client will be authenticated. But the clients password has expired and must be changed. Which ppp server configuration allows the call be completed?

- A. ppp authentication ma-chap-v2
- B. ppp authentication ms-cahp-v2 callin
- C. ppp authentication chap
- D. ppp authentication callin
- E. ppp authentication ms-chap callin

Answer: B

NEW QUESTION 555

Refer to exhibit.

OI 2001:DB8:0:7::/64 [110/20]

via FE80::A8BB:CCFF:FE00:6F00, Ethernet0/0 OI 2001:DB8:0:8::/64 [110/100]

via FE80::A8BB:CCFF:FE00:6F00, Ethernet0/0 OI 2001:DB8:0:9::/64 [110/20]

When summarizing these routes, which route is the summarized route? via FE80::A8BB:CCFF:FE00:6F00, Ethernet0/0

- A. OI 2001:DB8::/48 [110/100] via FE80::A8BB:CCFF:FE00:6F00, Ethernet0/0
- B. OI 2001:DB8::/24 [110/100] via FE80::A8BB:CCFF:FE00:6F00, Ethernet0/0
- C. OI 2001:DB8::/32 [110/100] via FE80::A8BB:CCFF:FE00:6F00, Ethernet0/0
- D. OI 2001:DB8::/64 [110/100] via FE80::A8BB:CCFF:FE00:6F00, Ethernet0/0

Answer: A

NEW QUESTION 558

Refer to the exhibit.

```
R1
interface Loopback0
    ip address 172.16.1.1 255.255.255.255
interface FastEthernet0/0
    ip address 192.168.10.33 255.255.255.224
router eigrp 100
    eigrp router-id 172.16.1.1
    no auto-summary
    network 192.168.10.0
    network 172.16.0.0

R2
interface Loopback0
    ip address 172.16.2.2 255.255.255.255
interface FastEthernet0/0
    ip address 192.168.10.17 255.255.255.240
router eigrp 100
    eigrp router-id 172.16.2.2
    network 192.168.10.0
    network 172.16.0.0
```

R1 and R2 are unable to establish an EIGRP adjacency. Which action corrects the problem?

- A. Change the EIGRP router-id value on one of the routers so that the values on the two routers are different.
- B. Add the no auto-summary command to the R2 configuration so that it matches the R1 configuration.

- C. Change the autonomous system number on one of the routers so that each router has different values.
- D. Chang the IP address and subnet mask on R2 so that it is on the same subnet as R1.

Answer: D

NEW QUESTION 563

Which two statements about NetFlow templates are true? (Choose two)

- A. Only NetFlow version 5 is template-based.
- B. Templates can increase bandwidth usage
- C. NetFlow version 5 and version 9 are template-based
- D. Only NetFlow version 9 is template-based
- E. They can increase overall performance
- F. They can reduce bandwidth usage

Answer: BD

NEW QUESTION 565

Which command is implemented to display log messages with a timestamp that includes the length of time since the device was last rebooted?

- A. service timestamps log datetime msec
- B. logging facility 20
- C. service timestamps debugging localtime
- D. logging monitor 7
- E. service timestamps log uptime

Answer: E

NEW QUESTION 568

How can you minimize unicast flooding in a network?

- A. Configure HSRP on two routers, with one subnet preferred on the first router and different subnet preferred on the second router.
- B. Set the router's ARP timeout value to be the same as the timeout value for Layer forwarding table entries.
- C. Set the router's ARP timeout value to greater than the timeout value for Layer 2 forwarding table entries.
- D. Set the router's ARP timeout value to less than the timeout value for Layer 2 forwarding table entries.

Answer: B

NEW QUESTION 569

Drag and Drop the AAA features from the left onto the correct description on the right Select and Place:

Accounting	challenge and response operation
Authentication	feature that logs network usage
Authorization	authentication method that uses TCP
RADIUS	authentication method that uses UDP
TACACS+	controls specific access privileges of a user

nneettwwrrookkiinnngg

Answer:

Explanation:

Accounting
Authentication
Authorization
RADIUS
TACACS+

nneettwwrrookkiinnngg

Authentication
Accounting
TACACS+
RADIUS
Authorization

NEW QUESTION 574

Where must a network engineer configure the ip helper-address command on a router?

- A. On the interface that will receive the broadcast

- B. On the interface that is closest to the destination DHCP server
- C. On the global configuration mode
- D. On the DHCP configuration

Answer: A

NEW QUESTION 576

What attribute is used to influence traffic from AS200 and AS300 so that it uses link1 to reach AS100.

- A. MED
- B. AS_path
- C. weight
- D. local preference

Answer: A

NEW QUESTION 578

Which access list entry checks for an ACK within a packet TCP header?

- A. access-list 49 permit ip any any eq 21 tcp-ack
- B. access-list 149 permit tcp any any eq 21 established
- C. access-list 49 permit tcp anyany eq 21 tcp-ack
- D. access-list 49 permit tcp any any eq 21 established

Answer: B

NEW QUESTION 582

A network engineer wants to monitor hop-by-hop response time on the network Which IP SLA operation accomplishes this task?

- A. UDP echo
- B. ICMPecho
- C. ICMP path echo
- D. ICMP path jitter

Answer: C

NEW QUESTION 587

Which two options are benefits of BGP peer groups?(Choose two)

- A. A configuration change can be applied simultaneously to all peers in the peer group
- B. They can optimize backdoor routes
- C. They can be updated via multicast
- D. Each neighbor in a peer group can have different inbound BGP policies
- E. They use soft updates to minimize bandwidth consumption
- F. They support groups of paths

Answer: AD

NEW QUESTION 591

Which SNMP security level is available across all versions of the protocol?

- A. AuthPriv
- B. NoAuthPriv
- C. AuthNoPriv
- D. NoAuthNoPriv

Answer: A

NEW QUESTION 593

Which option is a prerequisite for stateful NAT64?

- A. application layer gateway
- B. ICMP64
- C. DNS64
- D. IPsec for IPv6

Answer: C

NEW QUESTION 595

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