

Simlets v3 OSPF, RIPV2, DHCP , EIGRP

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Passing Score: 820
Time Limit: 120 min
File Version: 3.0

OSPF, RIPV2, DHCP , EIGRP Simlet Practice VCE

update 6- April - 2017

16Q_CCNA_200_125 CCNA Lab Sim

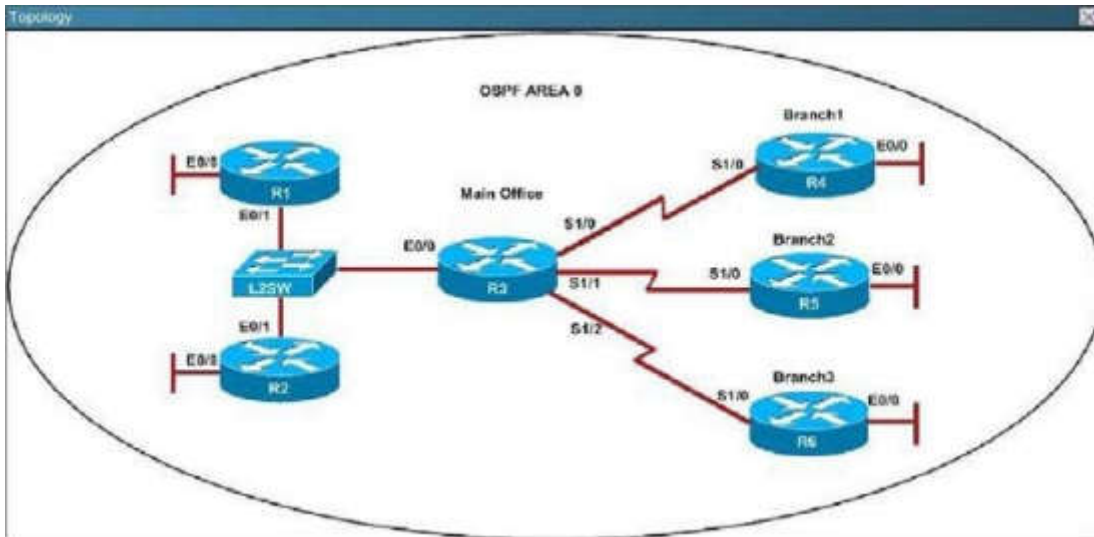


OSPF

QUESTION 1

An OSPF neighbor adjacency is not formed between R3 in the main office and R4 in the Branch1 office. What is causing the problem ?

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



Case Study Title (Case Study):

- A. **There is an area ID mismatch.**
- B. There is a Layer 2 issue; an encapsulation mismatch on serial links.
- C. There is an OSPF hello and dead interval mismatch.
- D. The R3 router ID is configured on R4.

Correct Answer: A

Section: (none)

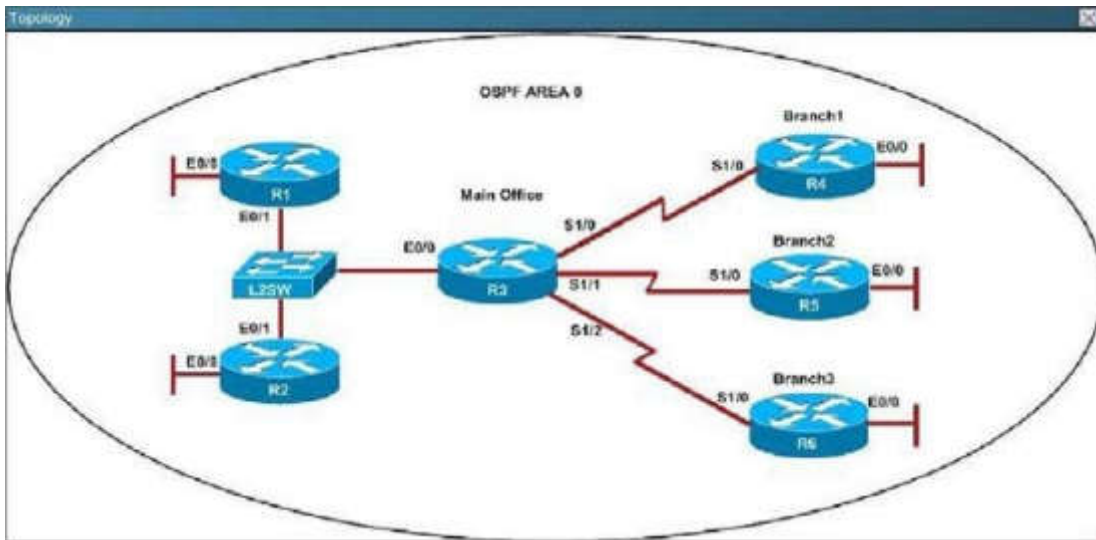
Explanation

Explanation/Reference:

QUESTION 2

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

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



Case Study Title (Case Study):

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

Correct Answer: C

Section: (none)

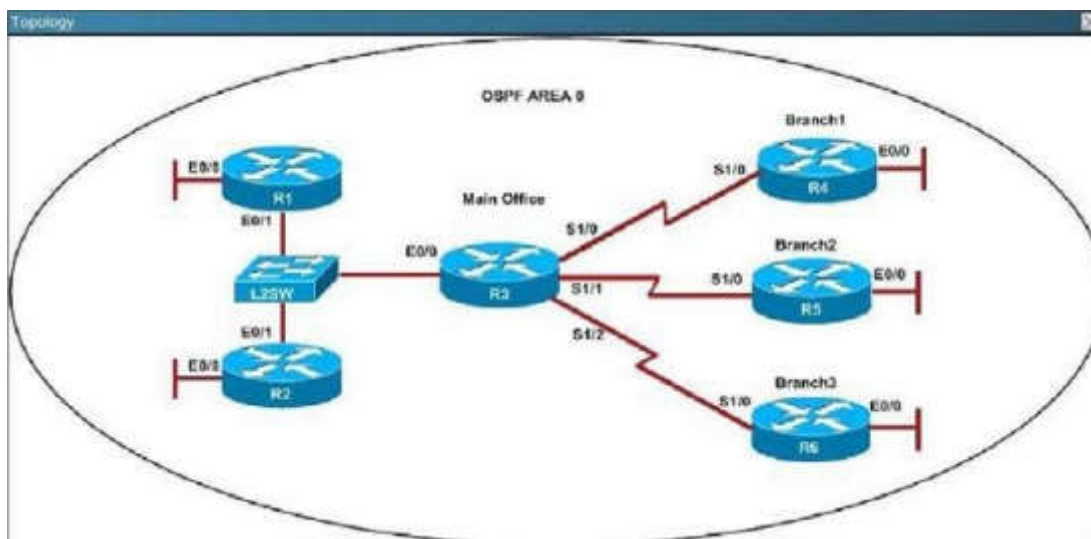
Explanation

Explanation/Reference:

QUESTION 3

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

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



Case Study Title (Case Study):

- A. R1 ethernet0/1 is shutdown. Configure no shutdown command.
- B. **R1 ethernet0/1 configured with a non-default OSPF hello interval of 25; configure no ip ospf hello-interval 25**
- C. R2 ethernet0/1 and R3 ethernet0/0 are configured with a non-default OSPF hello interval of 25; configure no ip ospf hello-interval 25
- D. Enable OSPF for R1 ethernet0/1; configure ip ospf 1 area 0 command under ethernet0/1.

Correct Answer: B

Section: (none)

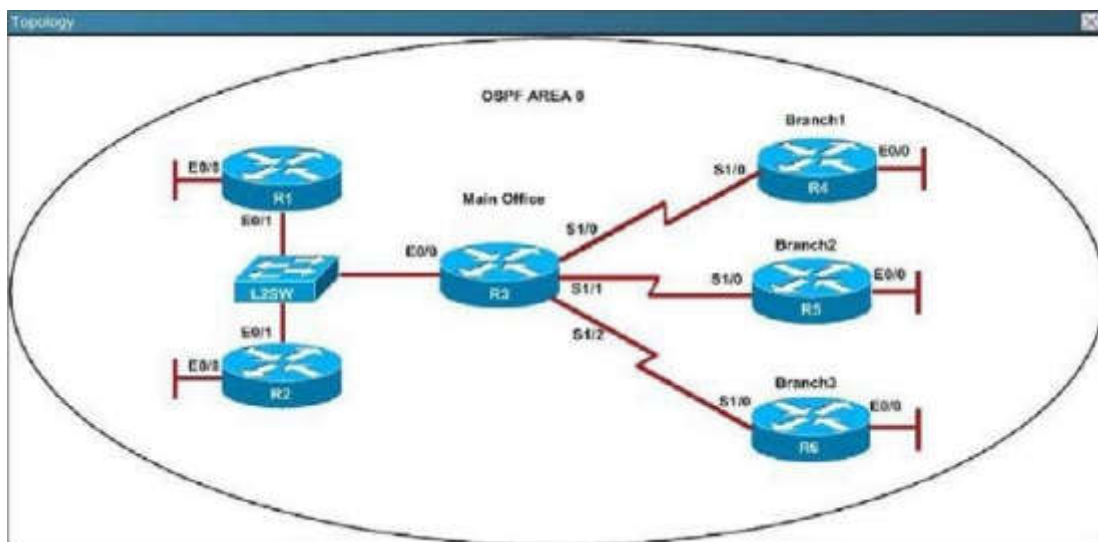
Explanation

Explanation/Reference:

QUESTION 4

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

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



Case Study Title (Case Study):

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

Correct Answer: D

Section: (none)

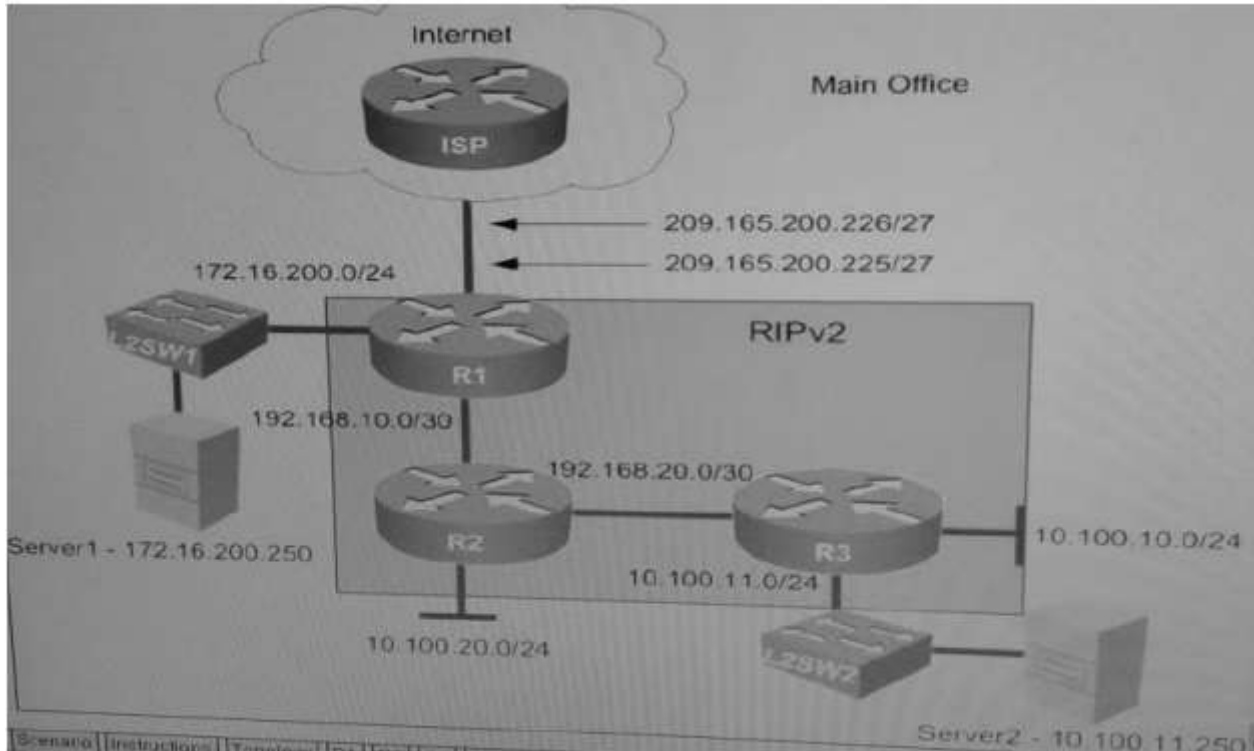
Explanation

Explanation/Reference:

DHCP

QUESTION 1

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



Case Study Title (Case Study):

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

Correct Answer: A

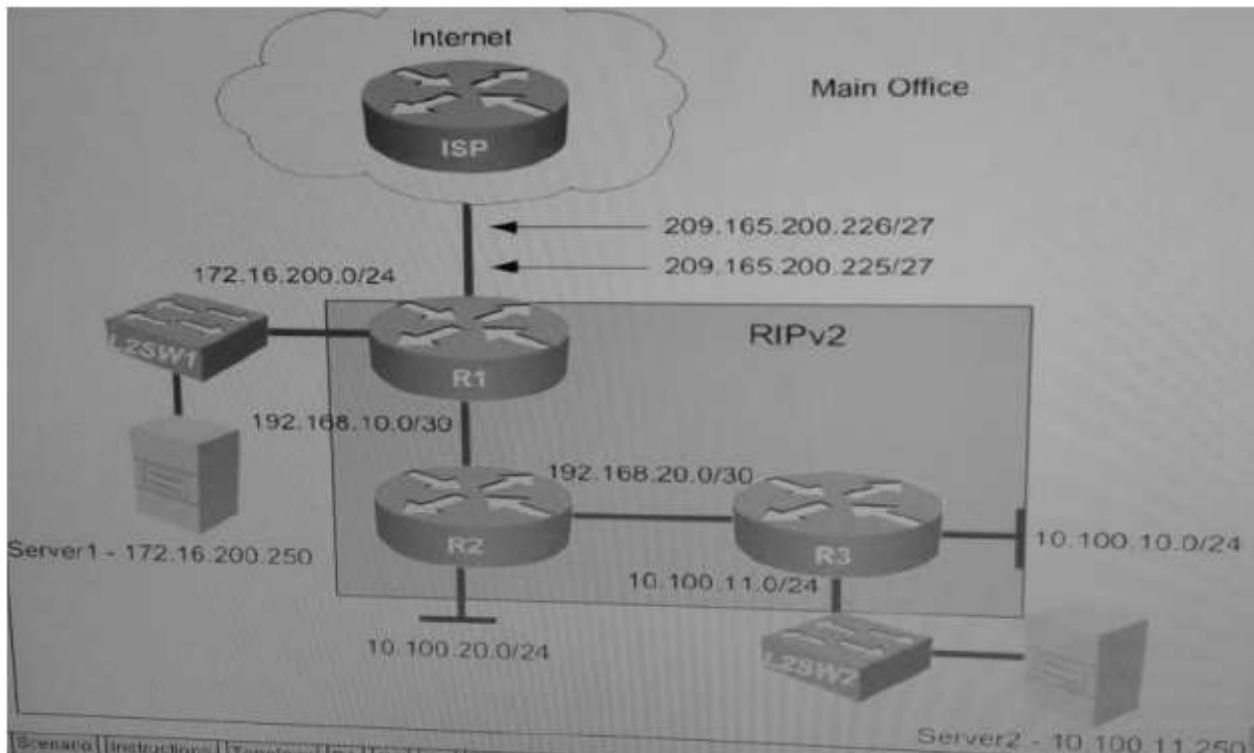
Section: (none)

Explanation

Explanation/Reference:

QUESTION 2

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



Case Study Title (Case Study):

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

Correct Answer: D

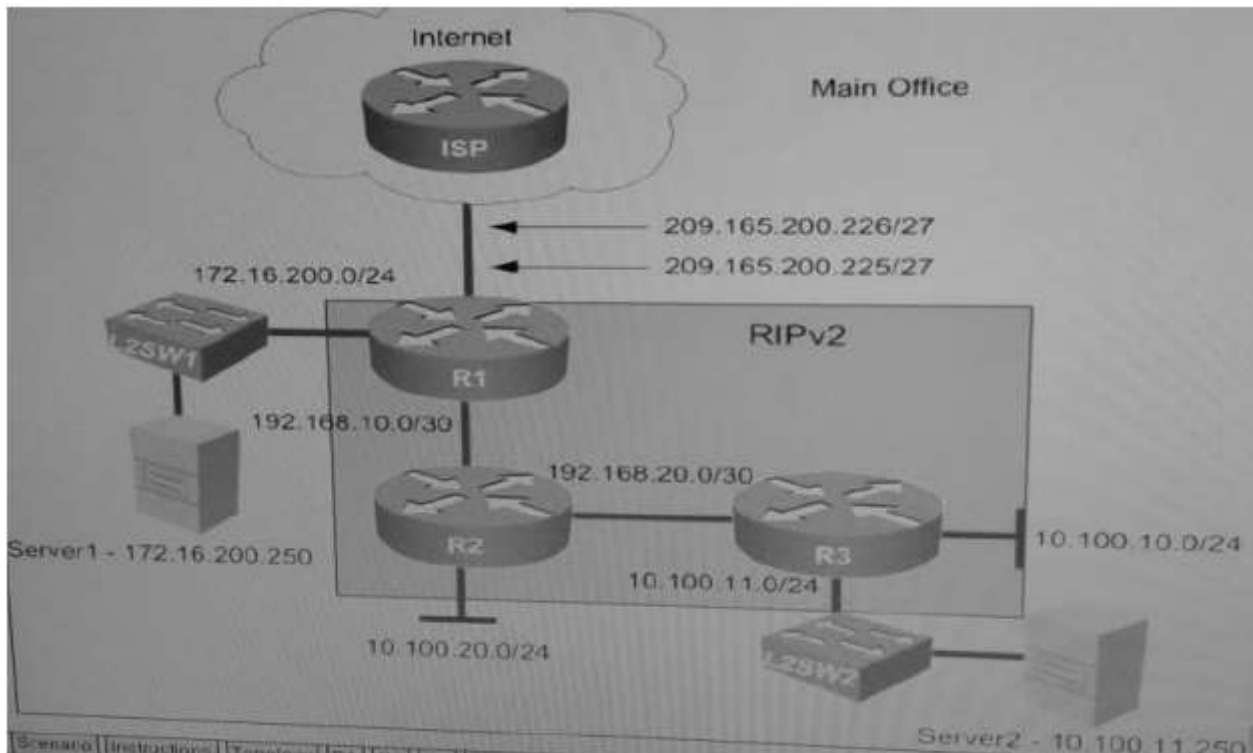
Section: (none)

Explanation

Explanation/Reference:

QUESTION 3

Why do applications that are installed on PC's in R2 LAN network 10.100.20.0/24 are unable to communicate with server1 ?



Case Study Title (Case Study):

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

Correct Answer: C

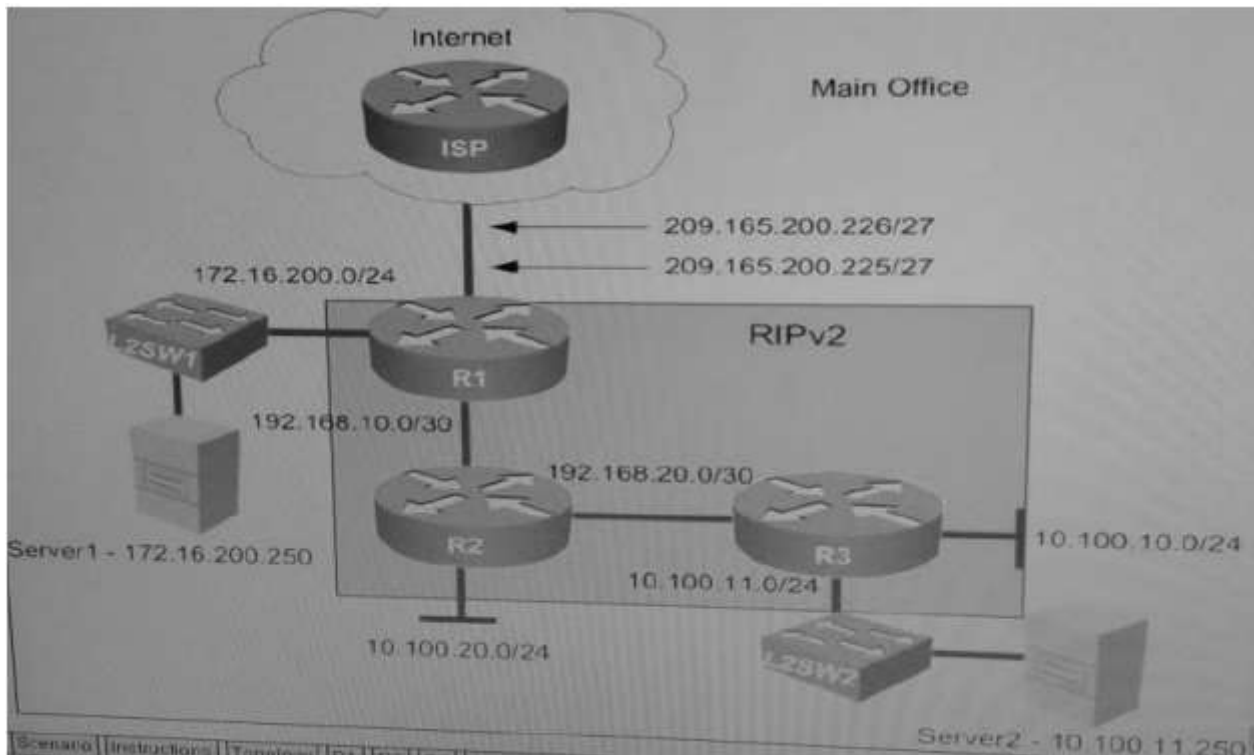
Section: (none)

Explanation

Explanation/Reference:

QUESTION 4

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



Case Study Title (Case Study):

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

Correct Answer: A

Section: (none)

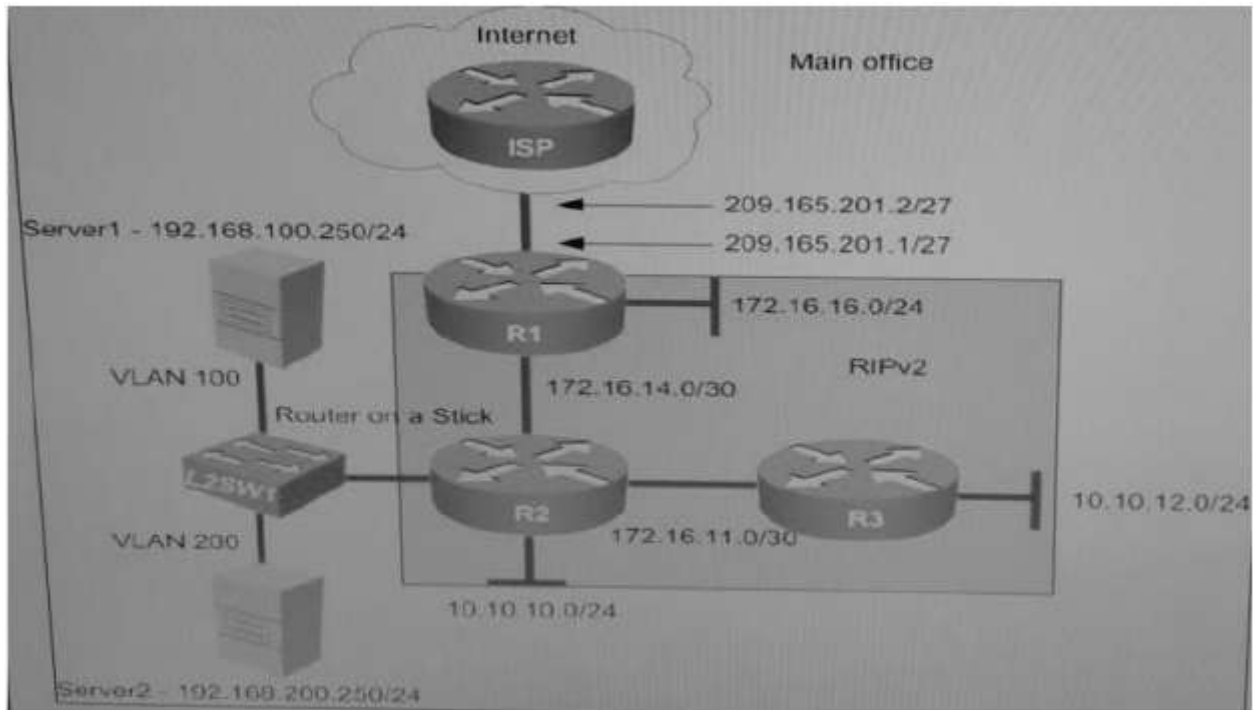
Explanation

Explanation/Reference:

RIP V2

QUESTION 1

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



Case Study Title (Case Study):

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

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 2

Users in the main office complain that they are unable to reach internet sites. You observe that internet traffic that is destined towards ISP router is not forwarded correctly on Router R1. What could be an issue?

Ping to Internet server shows the following results from R1:

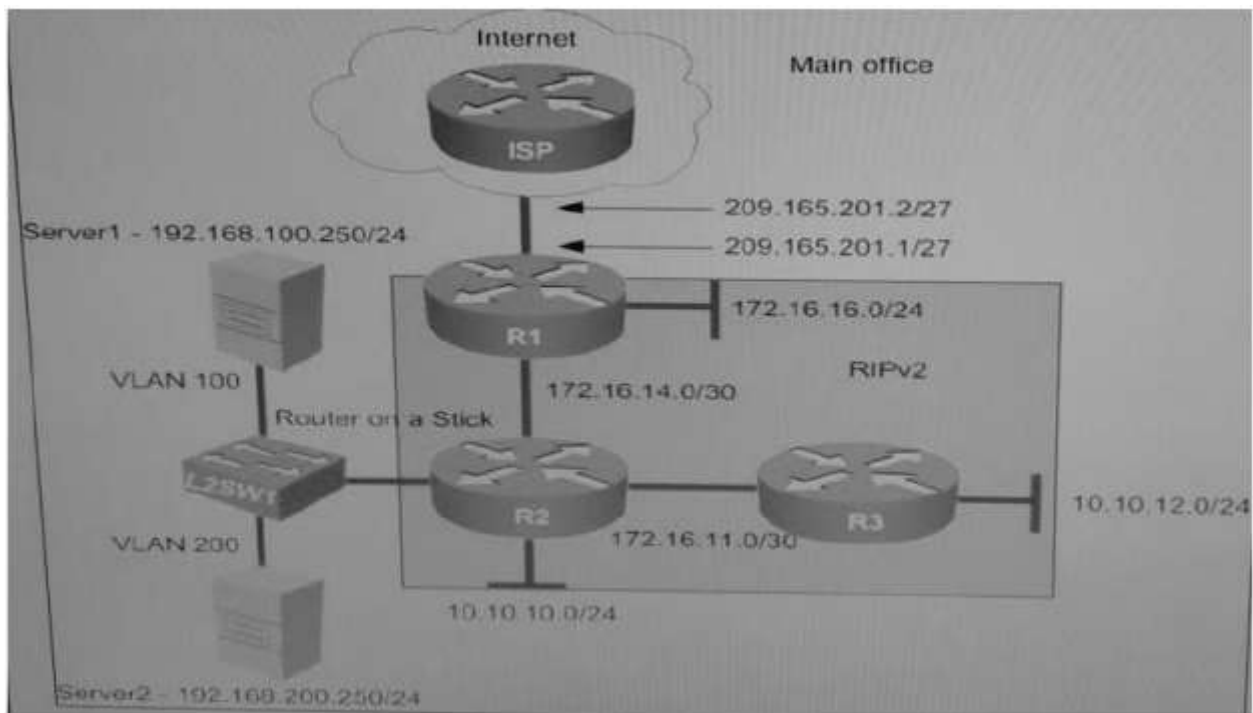
```
R1#ping 209.165.200.225
```

```
Type escape sequence to abort.
```

```
Sending 5, 100-byte ICMP Echos to 209.165.200.225, timeout is 2 seconds:
```

```
.....
```

```
Success rate is 0 percent (0/5)
```



Case Study Title (Case Study):

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

Correct Answer: B

Section: (none)

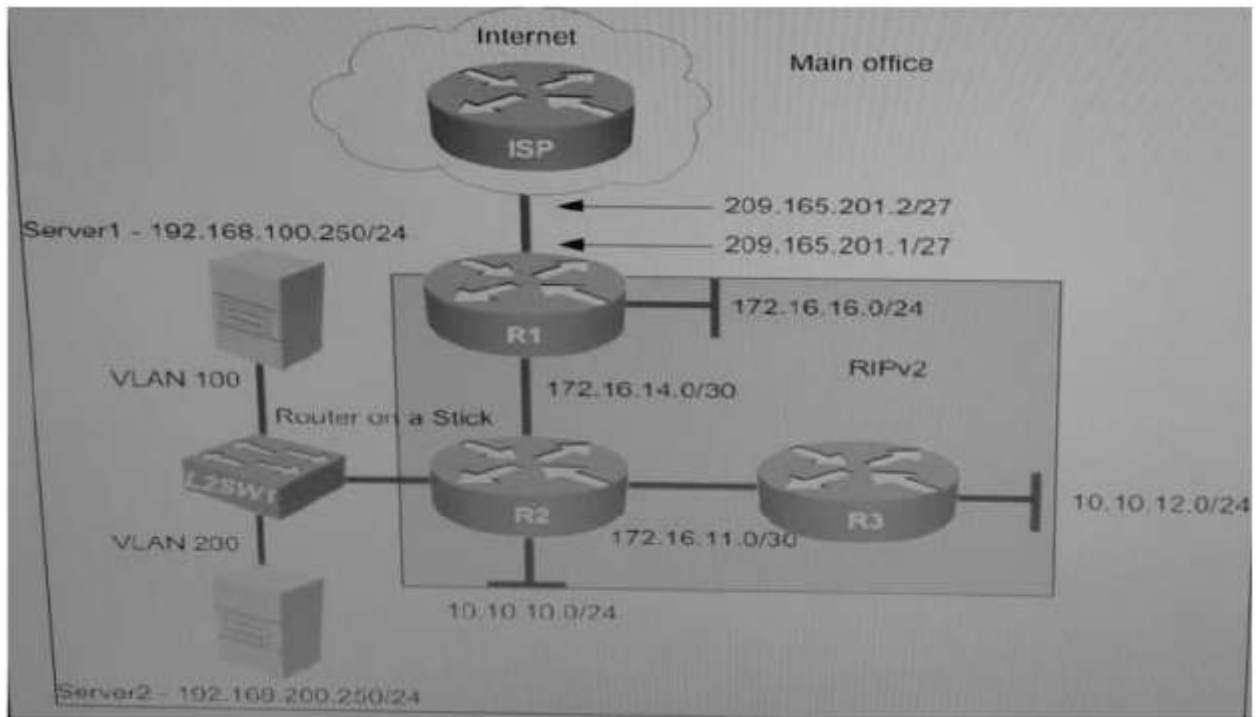
Explanation

Explanation/Reference:

QUESTION 3

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

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



Case Study Title (Case Study):

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

Correct Answer: C

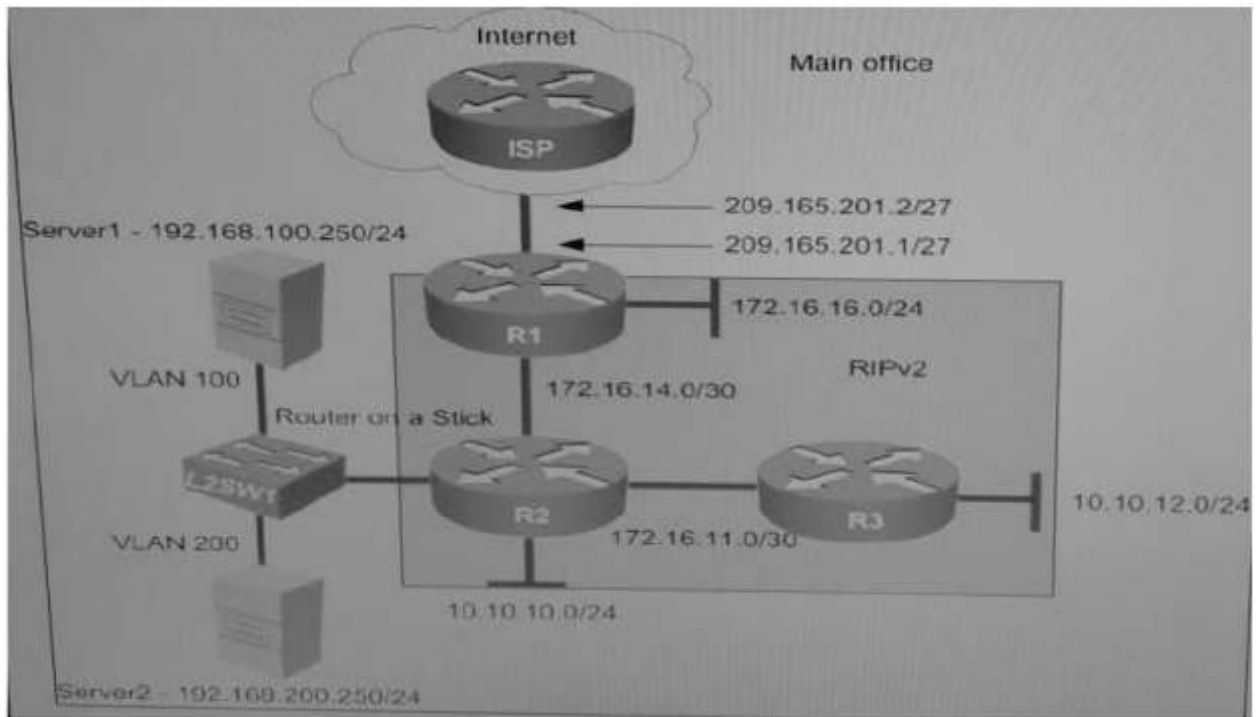
Section: (none)

Explanation

Explanation/Reference:

QUESTION 4

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



Case Study Title (Case Study):

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

Correct Answer: B

Section: (none)

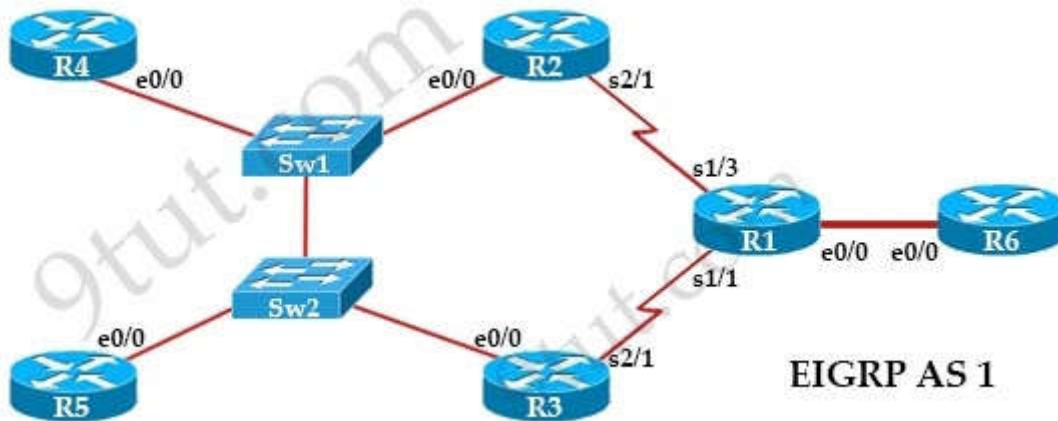
Explanation

Explanation/Reference:

EIGRP

QUESTION 1

The loopback interfaces on R4 with the IP addresses of 10.4.4.4/32, 10.4.4.5/32 and 10.4.4.6/32 are not appearing in the routing table of R5. Why are the interfaces missing ?



R1:
 int lo0
 ip address 10.1.1.1 255.255.255.255
 int e0/0
 ip address 192.168.16.1 255.255.255.0
 int s1/1
 ip address 192.168.13.1 255.255.255.0
 bandwidth 1000
 int s1/3
 ip address 192.168.12.1 255.255.255.0
 !
 router eigrp 1
 network 192.168.12.0
 network 192.168.13.0
 network 192.168.16.0

R2:
 int lo0
 ip address 10.2.2.2 255.255.255.255
 int e0/0
 ip address 192.168.123.2 255.255.255.0
 int s2/1
 ip address 192.168.12.2 255.255.255.0
 !
 router eigrp 1
 network 10.2.2.2 0.0.0.0
 network 192.168.12.0
 network 192.168.123.0

R3:
 int lo0
 ip address 10.3.3.3 255.255.255.255
 int e0/0
 ip address 192.168.12.3 255.255.255.0
 int s2/1
 ip address 192.168.13.3 255.255.255.0
 !
 router eigrp 1
 network 10.3.3.3 0.0.0.0
 network 192.168.13.0
 network 192.168.123.0

R4:
 int lo0
 ip address 10.4.4.4 255.255.255.255
 int lo1
 ip address 10.4.4.5 255.255.255.255
 int lo2
 ip address 10.4.4.6 255.255.255.255
 int e0/0
 ip address 192.168.123.4 255.255.255.0
 !
 router eigrp 2
 network 10.4.4.4 0.0.0.0
 network 10.4.4.5 0.0.0.0
 network 10.4.4.6 0.0.0.0
 network 192.168.123.0

R5:
 int lo0
 ip address 10.5.5.5 255.255.255.255
 int lo1
 ip address 10.5.5.55 255.255.255.255
 int e0/0
 ip address 192.168.123.5 255.255.255.0
 !
 router eigrp 1
 network 10.5.5.5 0.0.0.0
 network 10.5.5.55 0.0.0.0
 network 10.10.10.0 0.0.0.255
 network 192.168.123.0

R6:
 int lo0
 ip address 10.6.6.6 255.255.255.255
 int e0/0
 ip address 192.168.12.6 255.255.255.0
 !
 router eigrp 1
 network 10.6.6.6 0.0.0.0

Case Study Title (Case Study):

- A. The interfaces are shutdown, so they are not being advertised.
- B. R4 has been incorrectly configured to be in another AS, so it does not peer with R5.
- C. Automatic summarization is enabled, so only the 10.0.0.0 network is displayed.
- D. **The loopback addresses haven't been advertised, and the network command is missing on R4.**

Correct Answer: D

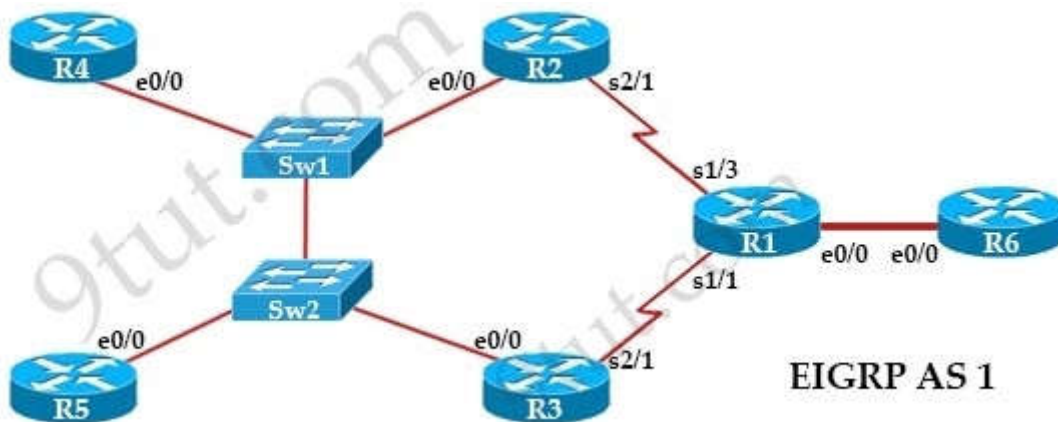
Section: (none)

Explanation

Explanation/Reference:

QUESTION 2

Which path does traffic take from R1 to R5 ?



R1: int lo0 ip address 10.1.1.1 255.255.255.255 int e0/0 ip address 192.168.16.1 255.255.255.0 int s1/1 ip address 192.168.13.1 255.255.255.0 bandwidth 1000 int s1/3 ip address 192.168.12.1 255.255.255.0 ! router eigrp 1 network 192.168.12.0 network 192.168.13.0 network 192.168.16.0	R2: int lo0 ip address 10.2.2.2 255.255.255.255 int e0/0 ip address 192.168.123.2 255.255.255.0 int s2/1 ip address 192.168.12.2 255.255.255.0 ! router eigrp 1 network 10.2.2.2 0.0.0.0 network 192.168.12.0 network 192.168.123.0	R3: int lo0 ip address 10.3.3.3 255.255.255.255 int e0/0 ip address 192.168.123.3 255.255.255.0 int s2/1 ip address 192.168.13.3 255.255.255.0 ! router eigrp 1 network 10.3.3.3 0.0.0.0 network 192.168.13.0 network 192.168.123.0
R4: int lo0 ip address 10.4.4.4 255.255.255.255 int lo1 ip address 10.4.4.5 255.255.255.255 int lo2 ip address 10.4.4.6 255.255.255.255 int e0/0 ip address 192.168.123.4 255.255.255.0 ! router eigrp 2 network 10.4.4.4 0.0.0.0 network 10.4.4.5 0.0.0.0 network 10.4.4.6 0.0.0.0 network 192.168.123.0	R5: int lo0 ip address 10.5.5.5 255.255.255.255 int lo1 ip address 10.5.5.55 255.255.255.255 int e0/0 ip address 192.168.123.5 255.255.255.0 ! router eigrp 1 network 10.5.5.5 0.0.0.0 network 10.5.5.55 0.0.0.0 network 10.10.10.0 0.0.0.255 network 192.168.123.0	R6: int lo0 ip address 10.6.6.6 255.255.255.255 int e0/0 ip address 192.168.123.6 255.255.255.0 ! router eigrp 1 network 10.6.6.6 0.0.0.0

Case Study Title (Case Study):

- A. The traffic goes through R2.
- B. The traffic goes through R3
- C. **The traffic is equally load-balanced over R2 and R3.**
- D. The traffic is unequally load-balanced over R2 and R3.

Correct Answer: C

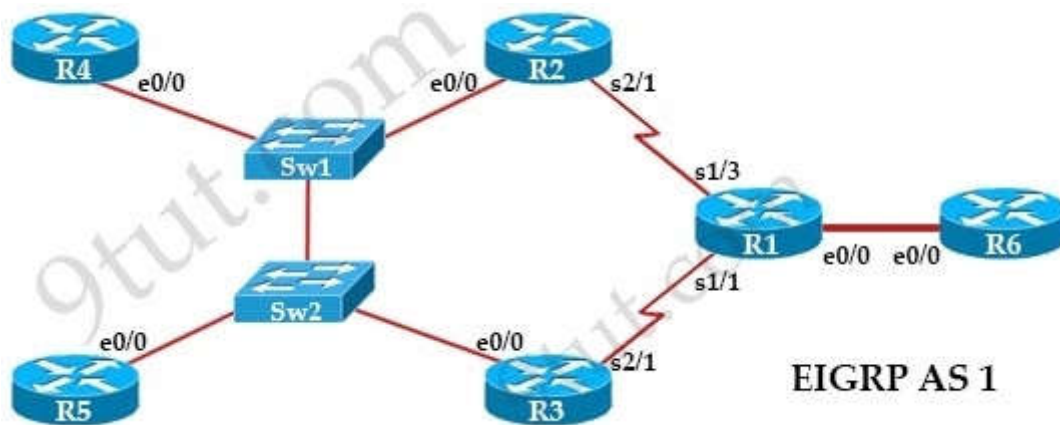
Section: (none)

Explanation

Explanation/Reference:

QUESTION 3

Router R6 does not form an EIGRP neighbor relationship correctly with router R1. What is the cause for this misconfiguration ?


R1:

```

int lo0
ip address 10.1.1.1 255.255.255.255
int e0/0
ip address 192.168.16.1 255.255.255.0
int s1/1
ip address 192.168.13.1 255.255.255.0
bandwidth 1000
int s1/3
ip address 192.168.12.1 255.255.255.0
!
router eigrp 1
network 192.168.12.0
network 192.168.13.0
network 192.168.16.0

```

R2:

```

int lo0
ip address 10.2.2.2 255.255.255.255
int e0/0
ip address 192.168.123.2 255.255.255.0
int s2/1
ip address 192.168.12.2 255.255.255.0
!
router eigrp 1
network 10.2.2.2 0.0.0.0
network 192.168.12.0
network 192.168.123.0

```

R3:

```

int lo0
ip address 10.3.3.3 255.255.255.255
int e0/0
ip address 192.168.12.3 255.255.255.0
int s2/1
ip address 192.168.13.3 255.255.255.0
!
router eigrp 1
network 10.3.3.3 0.0.0.0
network 192.168.13.0
network 192.168.123.0

```

R4:

```

int lo0
ip address 10.4.4.4 255.255.255.255
int lo1
ip address 10.4.4.5 255.255.255.255
int lo2
ip address 10.4.4.6 255.255.255.255
int e0/0
ip address 192.168.123.4 255.255.255.0
!
router eigrp 2
network 10.4.4.4 0.0.0.0
network 10.4.4.5 0.0.0.0
network 10.4.4.6 0.0.0.0
network 192.168.123.0

```

R5:

```

int lo0
ip address 10.5.5.5 255.255.255.255
int lo1
ip address 10.5.5.55 255.255.255.255
int e0/0
ip address 192.168.123.5 255.255.255.0
!
router eigrp 1
network 10.5.5.5 0.0.0.0
network 10.5.5.55 0.0.0.0
network 10.10.10.0 0.0.0.255
network 192.168.123.0

```

R6:

```

int lo0
ip address 10.6.6.6 255.255.255.255
int e0/0
ip address 192.168.16.6 255.255.255.0
!
router eigrp 1
network 10.6.6.6 0.0.0.0

```

Case Study Title (Case Study):

- A. **The K values mismatch.**
- B. The AS does not match.
- C. The network command is missing.
- D. The passive-interface command is enabled.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 4

Study the following output taken on R1:

R1#ping 10.5.5.55 source 10.1.1.1

Type escape sequence to abort.

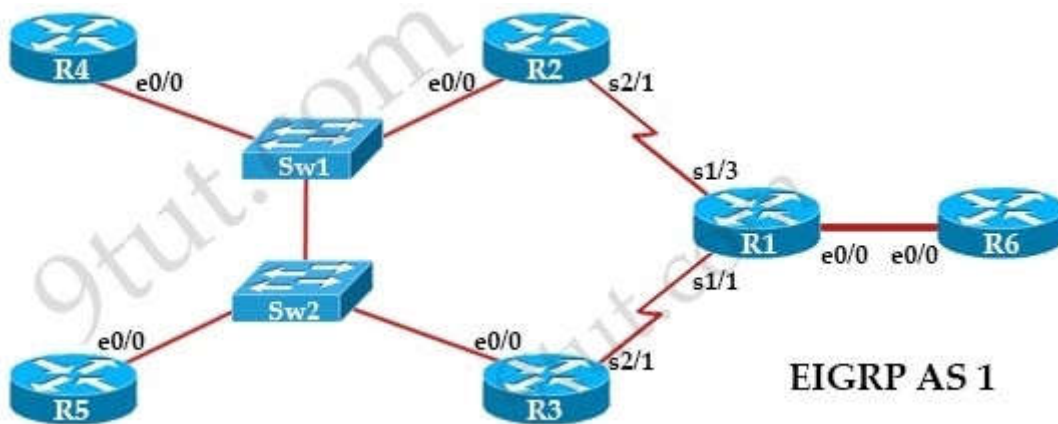
Sending 5, 100-byte ICMP Echos to 10.5.5.55, timeout is 2 seconds:

Packet sent with a source address of 10.1.1.1

.....

Success rate is 0 percent (0/5)

Why are the pings failing ?



R1: int lo0 ip address 10.1.1.1 255.255.255.255 int e0/0 ip address 192.168.16.1 255.255.255.0 int s1/1 ip address 192.168.13.1 255.255.255.0 bandwidth 1000 int s1/3 ip address 192.168.12.1 255.255.255.0 ! router eigrp 1 network 192.168.12.0 network 192.168.13.0 network 192.168.16.0	R2: int lo0 ip address 10.2.2.2 255.255.255.255 int e0/0 ip address 192.168.123.2 255.255.255.0 int s2/1 ip address 192.168.12.2 255.255.255.0 ! router eigrp 1 network 10.2.2.2 0.0.0.0 network 192.168.12.0 network 192.168.123.0	R3: int lo0 ip address 10.3.3.3 255.255.255.255 int e0/0 ip address 192.168.12.3 255.255.255.0 int s2/1 ip address 192.168.13.3 255.255.255.0 ! router eigrp 1 network 10.3.3.3 0.0.0.0 network 192.168.13.0 network 192.168.123.0
R4: int lo0 ip address 10.4.4.4 255.255.255.255 int lo1 ip address 10.4.4.5 255.255.255.255 int lo2 ip address 10.4.4.6 255.255.255.255 int e0/0 ip address 192.168.123.4 255.255.255.0 ! router eigrp 2 network 10.4.4.4 0.0.0.0 network 10.4.4.5 0.0.0.0 network 10.4.4.6 0.0.0.0 network 192.168.123.0	R5: int lo0 ip address 10.5.5.5 255.255.255.255 int lo1 ip address 10.5.5.55 255.255.255.255 int e0/0 ip address 192.168.123.5 255.255.255.0 ! router eigrp 1 network 10.5.5.5 0.0.0.0 network 10.5.5.55 0.0.0.0 network 10.10.10.0 0.0.0.255 network 192.168.123.0	R6: int lo0 ip address 10.6.6.6 255.255.255.255 int e0/0 ip address 192.168.123.6 255.255.255.0 ! router eigrp 1 network 10.6.6.6 0.0.0.0

Case Study Title (Case Study):

- A. **The network statement is missing on R5 .**
- B. The loopback interface is shut down on R5 .
- C. The network statement is missing on R1 .
- D. The IP address that is configured on the Lo1 interface on R5 is incorrect .

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference: