➢ Vendor: Cisco

➢ Exam Code: 200-125

➢ Exam Name: Cisco Certified Network Associate (v3.0)

➢ Question 301 – Question 350

QUESTION 301
Syslog was configured with a level 3 trap. Which 4 types of logs would be generated (choose four)

A. Emergencies
B. Alerts
C. Critical
D. Errors
E. Warnings

Answer: ABCD
Explanation:
The Message Logging is divided into 8 levels as listed below:
Level Keyword Description
0 emergencies System is unusable
1 alerts Immediate action is needed
2 critical Critical conditions exist
3 errors Error conditions exist
4 warnings Warning conditions exist
5 notification Normal, but significant, conditions exist 6 informational Informational messages
7 debugging Debugging messages
The highest level is level 0 (emergencies). The lowest level is level 7. If you specify a level with the "logging console level" command, that level and all the higher levels will be displayed. For example, by using the "logging console warnings" command, all the logging of emergencies, alerts, critical, errors, warnings will be displayed.

QUESTION 302
What are the benefit of using Netflow? (Choose three.)

A. Network, Application & User Monitoring

B. Network Planning
C. Security Analysis
D. Accounting/Billing

Answer: ACD

QUESTION 303
Which protocol can cause overload on a CPU of a managed device?

A. Netflow
B. WCCP
C. IP SLA
D. SNMP

Answer: D
Explanation:
Sometimes, messages like this might appear in the router console:
%SNMP-3-CPUHOG: Processing [chars] of [chars]
They mean that the SNMP agent on the device has taken too much time to process a request.
You can determine the cause of high CPU use in a router by using the output of the show process cpu command.
Note: A managed device is a part of the network that requires some form of monitoring and management (routers, switches, servers, workstations, printers...).

QUESTION 304
What are the three things that the Netflow uses to consider the traffic to be in a same flow?

A. IP address
B. Interface name
C. Port numbers
D. L3 protocol type
E. MAC address

Answer: ACD
Explanation:
What is an IP Flow?
Each packet that is forwarded within a router or switch is examined for a set of IP packet attributes. These attributes are the IP packet identity or fingerprint of the packet and determine if the packet is unique or similar to other packets. Traditionally, an IP Flow is based on a set of 5 and up to 7 IP packet attributes.
IP Packet attributes used by NetFlow:
+ IP source address
+ IP destination address
+ Source port
+ Destination port
+ Layer 3 protocol type
+ Class of Service
+ Router or switch interface

QUESTION 305
What is the alert message generated by SNMP agents called ?

A. TRAP

B. INFORM
C. GET
D. SET

Answer: AB
Explanation:
A TRAP is a SNMP message sent from one application to another (which is typically on a remote host). Their purpose is merely to notify the other application that something has happened, has been noticed, etc. The big problem with TRAPs is that they're unacknowledged so you don't actually know if the remote application received your oh-so-important message to it. SNMPv2 PDUs fixed this by introducing the notion of an INFORM, which is nothing more than an acknowledged TRAP.

QUESTION 306
Which three features are added in SNMPv3 over SNMPv2?

A. Message Integrity
B. Compression
C. Authentication
D. Encryption
E. Error Detection

Answer: ACD

QUESTION 307
In a GLBP network, who is responsible for the arp request?

A. AVF
B. AVG
C. Active Router
D. Standby Router

Answer: B

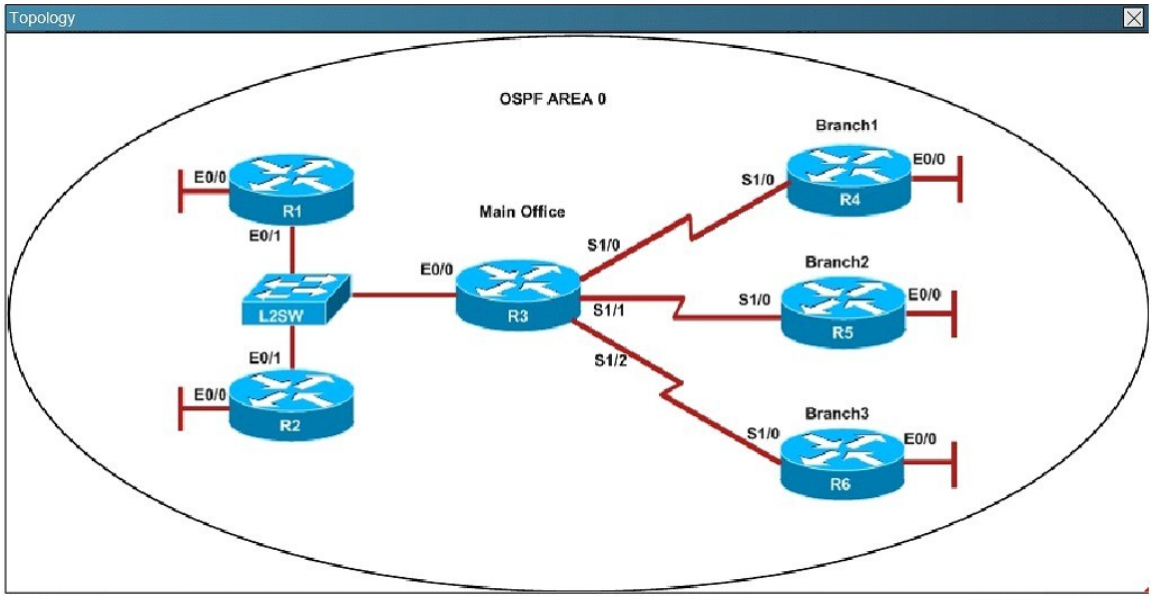
QUESTION 308
What levels will be trapped if the administrator executes the command router(config)# logging trap 4 (Choose four) ?

A. Emergency
B. Notice
C. Alert
D. Error
E. Warning

Answer: ACDE
Explanation:
The Message Logging is divided into 8 levels as listed below:
Level Keyword Description
0 emergencies System is unusable
1 alerts Immediate action is needed
2 critical Critical conditions exist
3 errors Error conditions exist
4 warnings Warning conditions exist

5 notification Normal, but significant, conditions exist 6 informational Informational messages
7 debugging Debugging messages
If you specify a level with the "logging trap level" command, that level and all the higher levels will be logged.
For example, by using the "logging trap 4 command, all the logging of emergencies, alerts, critical, errors, warnings will be logged.

QUESTION 309
Hotspot Question
Refer to the topology. Your company has decided to connect the main office with three other remote branch offices using point-to-point serial links.
You are required to troubleshoot and resolve OSPF neighbor adjacency issues between the main office and the routers located in the remote branch offices.



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

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.

Answer: A
Explanation:
A show running-config command on R3 and R4 shows that R4 is incorrectly configured for area 2:

R3

```
 no ip address
 shutdown
!
interface Ethernet0/2
 no ip address
 shutdown
!
interface Ethernet0/3
 no ip address
 shutdown
!
interface Serial1/0
 description ***Connected to R4-Branch1 office***
 ip address 10.10.240.1 255.255.255.252
 encapsulation ppp
 ip ospf 3 area 0
 serial restart-delay 0
!
interface Serial1/1
 description ***Connected to R5-Branch2 office***
 ip address 10.10.240.5 255.255.255.252
 encapsulation ppp
 ip ospf hello-interval 50
 ip ospf 3 area 0


 ppp authentication chap
```

R4

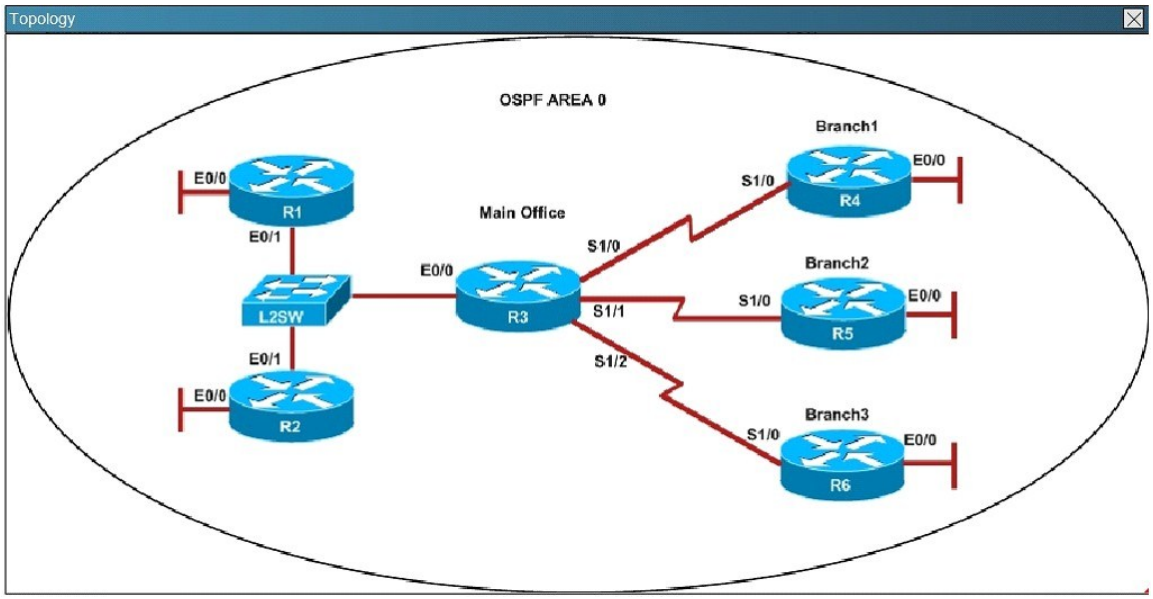
```
!
interface Ethernet0/2
 no ip address
 shutdown
!
interface Ethernet0/3
 no ip address
 shutdown
!
interface Serial1/0
 description ***Connected to R3-Main Branch office***
 ip address 10.10.240.2 255.255.255.252
 encapsulation ppp
 ip ospf 4 area 2
 serial restart-delay 0
!
interface Serial1/1
 no ip address
 shutdown
 serial restart-delay 0
!
interface Serial1/2
 no ip address
 shutdown


 --- More (37) ---
```

QUESTION 310

Hotspot Question

Refer to the topology. Your company has decided to connect the main office with three other remote branch offices using point-to-point serial links.

You are required to troubleshoot and resolve OSPF neighbor adjacency issues between the main office and the routers located in the remote branch offices.



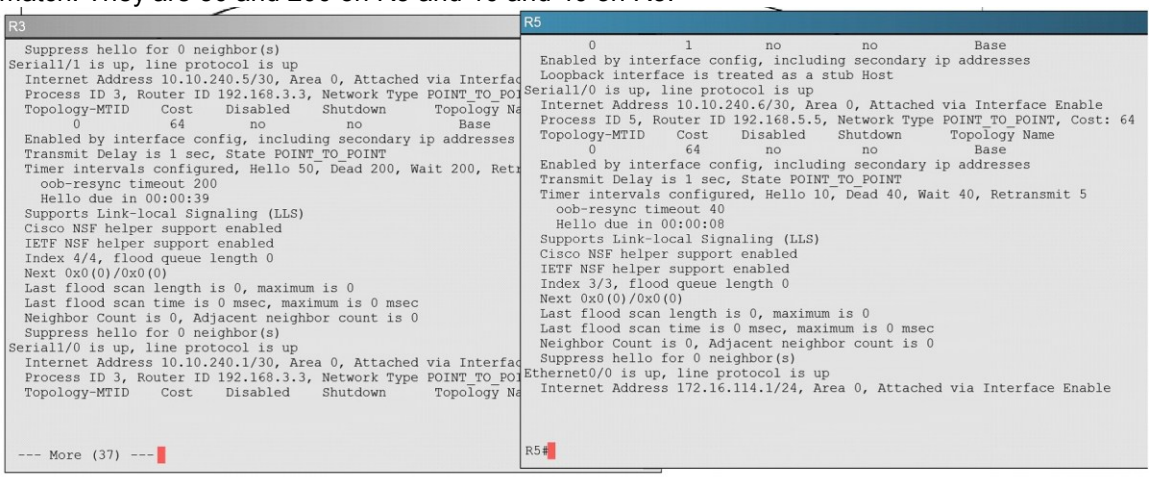
An OSPF neighbor adjacency is not formed between R3 in the main office and R5 in the Branch2 office. What is causing the problem?

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

Answer: C

Explanation:

The "show ip ospf interface command on R3 and R5 shows that the hello and dead intervals do not match. They are 50 and 200 on R3 and 10 and 40 on R5.

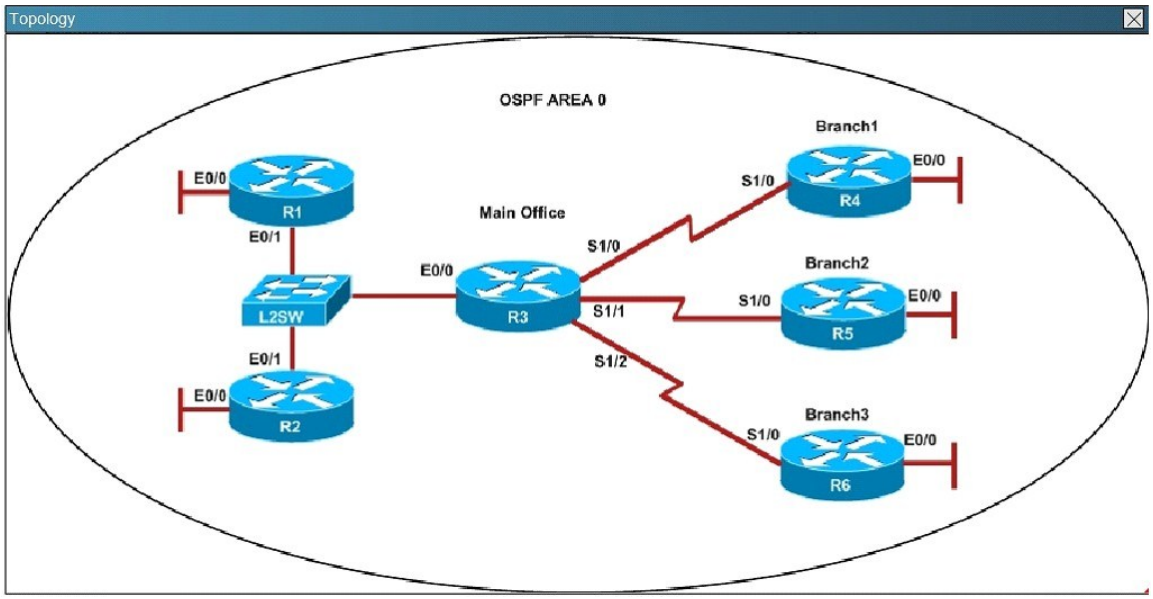


QUESTION 311

Hotspot Question

Refer to the topology. Your company has decided to connect the main office with three other remote branch offices using point-to-point serial links.

You are required to troubleshoot and resolve OSPF neighbor adjacency issues between the main office and the routers located in the remote branch offices.



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

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

Answer: B

Explanation:

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

R1

```
!
!
!
!
!
interface Loopback0
 description ***Loopback***
 ip address 192.168.1.1 255.255.255.255
 ip ospf 1 area 0
!
interface Ethernet0/0
 description ***Connected to R1-LAN***
 ip address 10.10.110.1 255.255.255.0
 ip ospf 1 area 0
!
interface Ethernet0/1
 description ***Connected to L2SW***
 ip address 10.10.230.1 255.255.255.0
 ip ospf hello-interval 25
 ip ospf 1 area 0
!
interface Ethernet0/2
 no ip address
 shutdown


 --- More (35) ---
```

R2

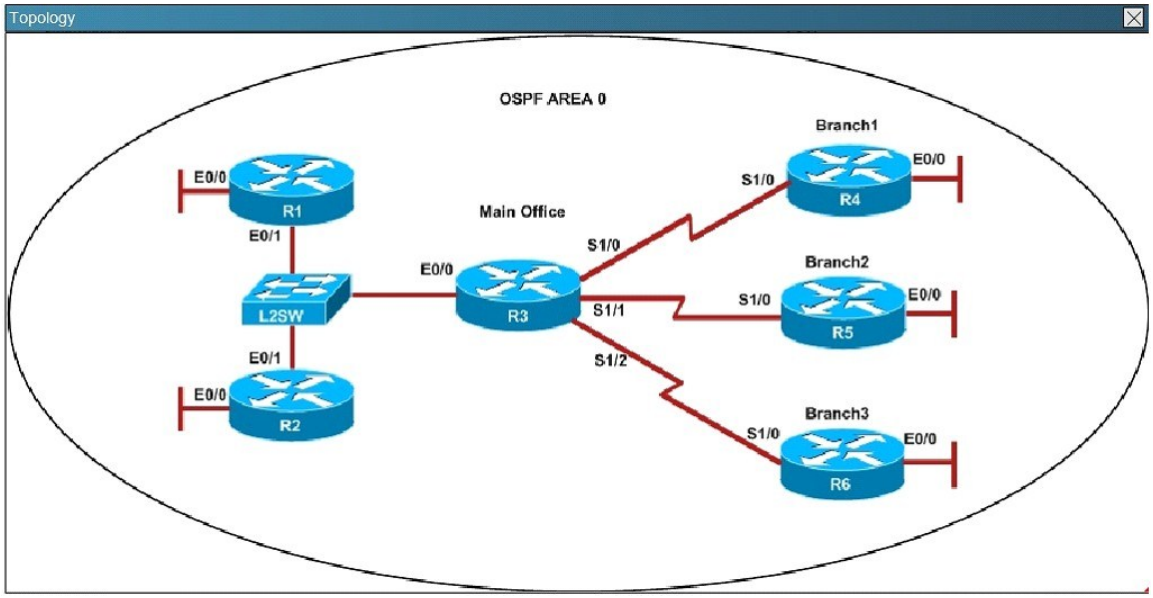
```
!
!
!
!
!
!
interface Loopback0
 description ***Loopback***
 ip address 192.168.2.2 255.255.255.255
 ip ospf 2 area 0
!
interface Ethernet0/0
 description ***Connected to R2-LAN***
 ip address 10.10.120.1 255.255.255.0
 ip ospf 2 area 0
!
interface Ethernet0/1
 description ***Connected to L2SW***
 ip address 10.10.230.2 255.255.255.0
 ip ospf 2 area 0
!
interface Ethernet0/2
 no ip address
 shutdown


 --- More (35) ---
```

QUESTION 312

Hotspot Question

Refer to the topology. Your company has decided to connect the main office with three other remote branch offices using point-to-point serial links.

You are required to troubleshoot and resolve OSPF neighbor adjacency issues between the main office and the routers located in the remote branch offices.



An OSPF neighbor adjacency is not formed between R3 in the main office and R6 in the Branch3

office. What is causing the problem?

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

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

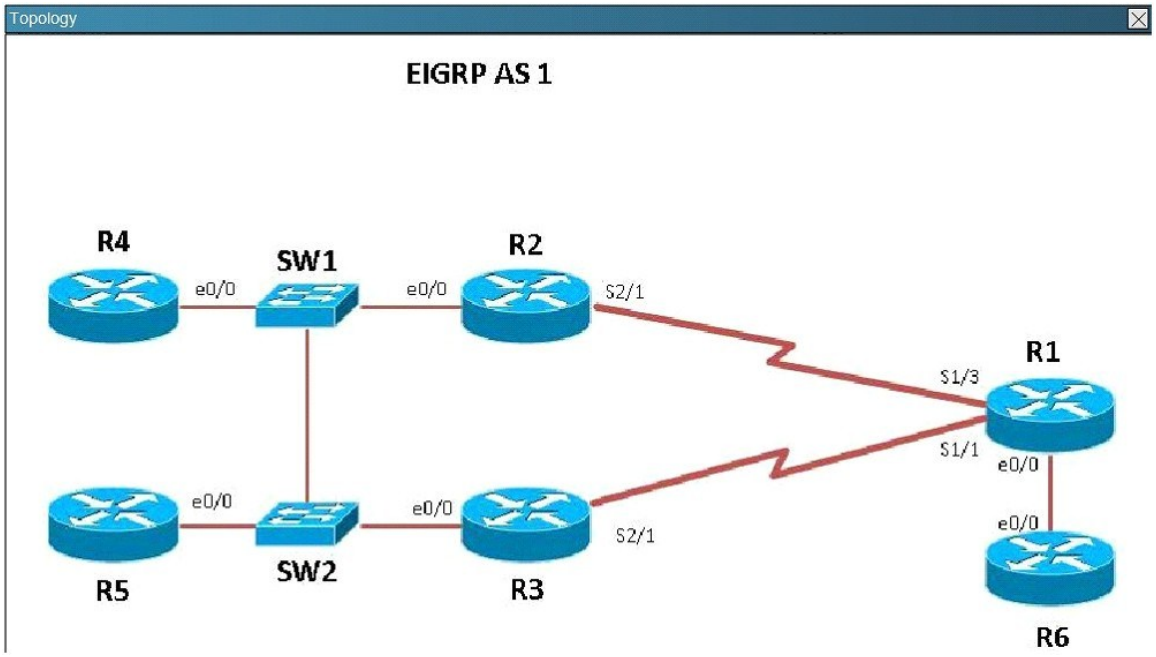
R3

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



!
```

R6

```
 no ip address
 shutdown
 serial restart-delay 0
!
interface Serial1/2
 no ip address
 shutdown
 serial restart-delay 0
!
interface Serial1/3
 no ip address
 shutdown
 serial restart-delay 0
!
router ospf 6
 router-id 192.168.3.3
!
ip forward-protocol nd
!
!
no ip http server
no ip http secure-server
!
!



!
```

QUESTION 313
Hotspot Question
Refer to the topology. Your company has connected the routers R1. R2. and R3 with serial links. R2 and R3 are connected to the switches SW1 and SW2, respectively. SW1 and SW2 are also connected to the routers R4 and R5.
The EIGRP routing protocol is configured.
You are required to troubleshoot and resolve the EIGRP issues between the various routers.
Use the appropriate show commands to troubleshoot the issues.



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?

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.

Answer: B
Explanation:
For an EIGRP neighbor to form, the following must match:
- Neighbors must be in the same subnet- K values- AS numbers- Authentication method and key strings
Here, we see that R4 is configured for EIGRP AS 2, when it should be AS 1.

R4

```
!
interface Ethernet0/2
 no ip address
 shutdown
!
interface Ethernet0/3
 no ip address
 shutdown
!
!
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
!
ip forward-protocol nd
!
!
no ip http server
no ip http secure-server
!
!
!

 --- More (18) ---
```

R5

```
interface Ethernet0/2
 no ip address
 shutdown
!
interface Ethernet0/3
 no ip address
 shutdown
!
!
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
!
ip forward-protocol nd
!
!
no ip http server
no ip http secure-server
!
!
!
!


control-plane
```

QUESTION 314

Hotspot Question

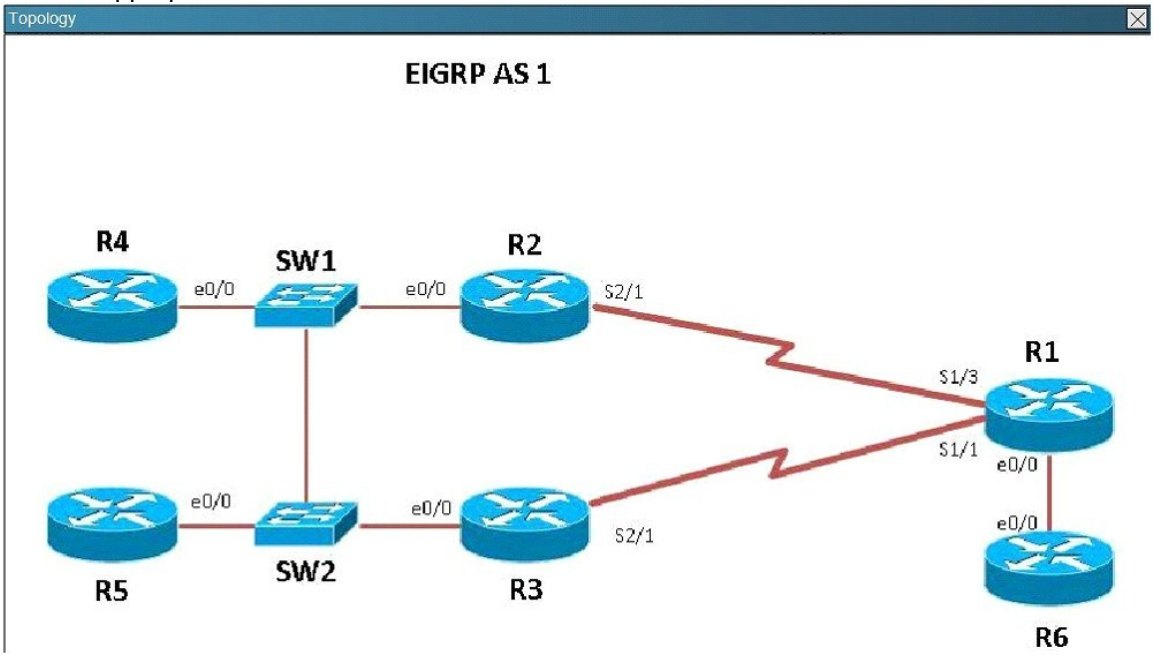
Refer to the topology. Your company has connected the routers R1. R2. and R3 with serial links. R2 and R3 are connected to the switches SW1 and SW2, respectively. SW1 and SW2 are also connected to the routers R4 and R5.

The EIGRP routing protocol is configured.

You are required to troubleshoot and resolve the EIGRP issues between the various routers.

Use the appropriate show commands to troubleshoot the issues.

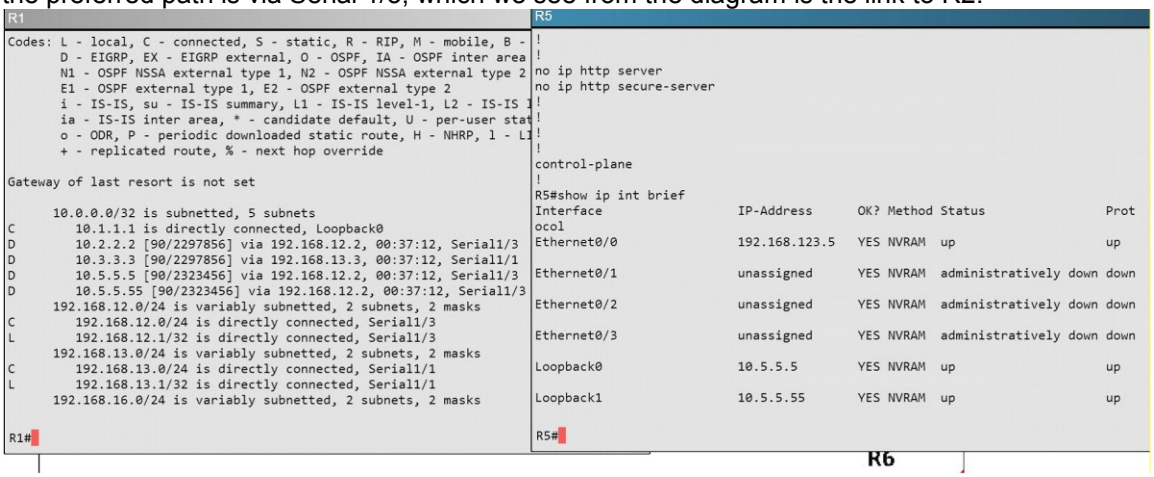
Topology



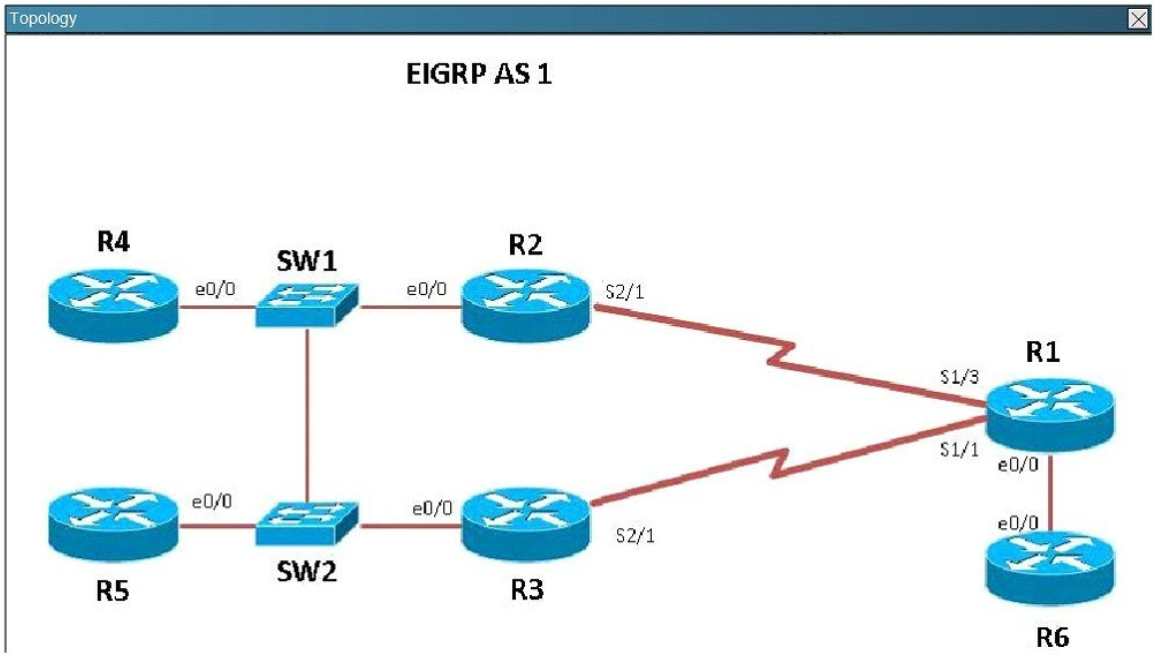
Which path does traffic take from R1 to R5?

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.

Answer: A
Explanation:
Using the "show ip int brief command" on R5 we can see the IP addresses assigned to this router. Then, using the "show ip route" command on R1 we can see that to reach 10.5.5.5 and 10.5.5.55 the preferred path is via Serial 1/3, which we see from the diagram is the link to R2.



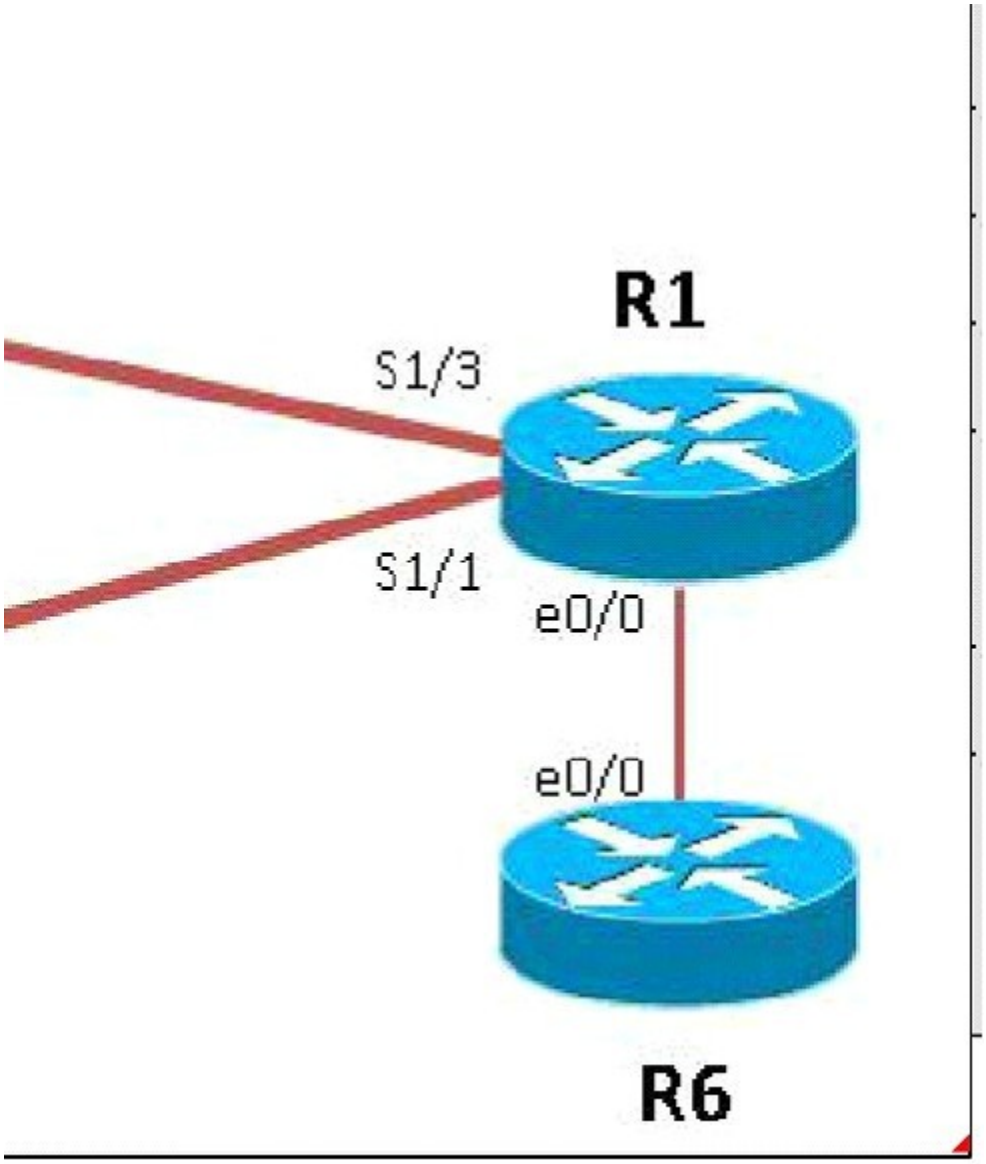
QUESTION 315
Hotspot Question
Refer to the topology. Your company has connected the routers R1. R2. and R3 with serial links. R2 and R3 are connected to the switches SW1 and SW2, respectively. SW1 and SW2 are also connected to the routers R4 and R5.
The EIGRP routing protocol is configured.
You are required to troubleshoot and resolve the EIGRP issues between the various routers.
Use the appropriate show commands to troubleshoot the issues.



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

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

Answer: C
Explanation:
The link from R1 to R6 is shown below:



As you can see, they are both using e0/0. The IP addresses are in the 192.168.16.0 network:

R1

```
Interface                  IP-Address      OK? Method Sta
ocol
Ethernet0/0                192.168.16.1    YES NVRAM  up
Ethernet0/1                unassigned      YES NVRAM  adm
Ethernet0/2                unassigned      YES NVRAM  adm
Ethernet0/3                unassigned      YES NVRAM  adm
Serial1/0                  unassigned      YES NVRAM  adm
Serial1/1                  192.168.13.1    YES NVRAM  up
Serial1/2                  unassigned      YES NVRAM  up
Serial1/3                  192.168.12.1    YES NVRAM  up
Serial2/0                  unassigned      YES NVRAM  adm
Serial2/1                  unassigned      YES NVRAM  up
Serial2/2                  unassigned      YES NVRAM  adm

R1#
```

R6

```
R6#
R6#
R6#
R6#
R6#show ip int brief
Interface                  IP-Address      OK? Method Status                Prot
ocol
Ethernet0/0                192.168.16.6    YES NVRAM  up                    up
Ethernet0/1                unassigned      YES NVRAM  administratively down down
Ethernet0/2                unassigned      YES NVRAM  administratively down down
Ethernet0/3                unassigned      YES NVRAM  administratively down down
Serial1/0                  unassigned      YES NVRAM  administratively down down
Serial1/1                  unassigned      YES NVRAM  up                    down
Serial1/2                  unassigned      YES NVRAM  administratively down down
Serial1/3                  unassigned      YES NVRAM  administratively down down
Loopback0                  10.6.6.6        YES NVRAM  up                    up

R6#
```

But when we look at the EIGRP configuration, the "network 192.168.16.0" command is missing on R6.

R1

```
 shutdown
 serial restart-delay 0
!
interface Serial2/1
 no ip address
 serial restart-delay 0
!
interface Serial2/2
 no ip address
 shutdown
 serial restart-delay 0
!
interface Serial2/3
 no ip address
 shutdown
 serial restart-delay 0
!
!
router eigrp 1
 network 192.168.12.0
 network 192.168.13.0
 network 192.168.16.0
!
ip forward-protocol nd

R1#
```

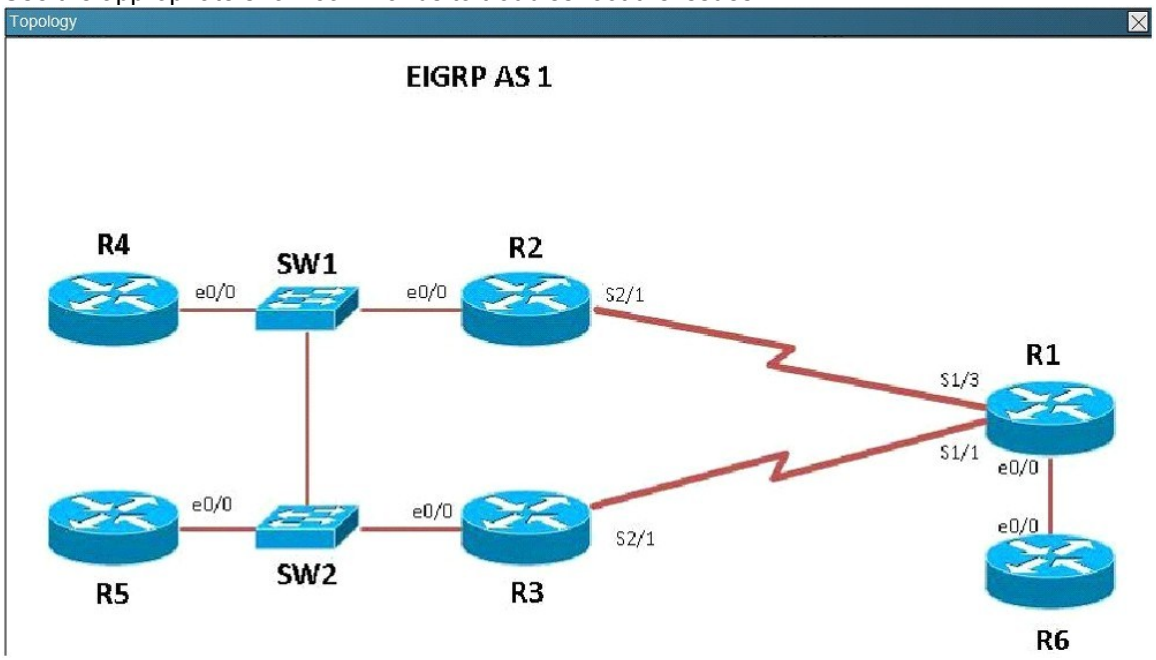
R6

```
 serial restart-delay 0
!
interface Serial1/1
 no ip address
 serial restart-delay 0
!
interface Serial1/2
 no ip address
 shutdown
 serial restart-delay 0
!
interface Serial1/3
 no ip address
 shutdown
 serial restart-delay 0
!
!
router eigrp 1
 network 10.6.6.6 0.0.0.0
!
ip forward-protocol nd
!
!
no ip http server

R6#
```

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)

QUESTION 316
Hotspot Question
Refer to the topology. Your company has connected the routers R1. R2. and R3 with serial links. R2 and R3 are connected to the switches SW1 and SW2, respectively. SW1 and SW2 are also connected to the routers R4 and R5.
The EIGRP routing protocol is configured.

You are required to troubleshoot and resolve the EIGRP issues between the various routers. Use the appropriate show commands to troubleshoot the issues.



Why are the pings failing?

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.

Answer: C
Explanation:
R5 does not have a route to the 10.1.1.1 network, which is the loopback0 IP address of R1. When looking at the EIGRP configuration on R1, we see that the 10.1.1.1 network statement is missing on R1.

R1

```
 no ip address
 serial restart-delay 0
!
interface Serial2/2
 no ip address
 shutdown
 serial restart-delay 0
!
interface Serial2/3
 no ip address
 shutdown
 serial restart-delay 0
!
!
router eigrp 1
 network 192.168.12.0
 network 192.168.13.0
 network 192.168.16.0
!
ip forward-protocol nd
!
!
no ip http server
no ip http secure-server

R1#
```

QUESTION 317
What is a valid HSRP virtual MAC address?

A. 0000.5E00.01A3
B. 0007.B400.AE01
C. 0000.0C07.AC15
D. 0007.5E00.B301

Answer: C
Explanation:
With HSRP, two or more devices support a virtual router with a fictitious MAC address and unique IP address. There are two version of HSRP.
+ With HSRP version 1, the virtual router's MAC address is 0000.0c07.ACxx , in which xx is the

HSRP group.
+ With HSRP version 2, the virtual MAC address if 0000.0C9F.Fxxx, in which xxx is the HSRP group.
Note: Another case is HSRP for IPv6, in which the MAC address range from 0005.73A0.0000 through 0005.73A0.0FFF.

QUESTION 318
In GLBP, which router will respond to client ARP requests?

A. The active virtual gateway will reply with one of four possible virtual MAC addresses.
B. All GLBP member routers will reply in round-robin fashion.
C. The active virtual gateway will reply with its own hardware MAC address.
D. The GLBP member routers will reply with one of four possible burned in hardware addresses.

Answer: A
Explanation:
One disadvantage of HSRP and VRRP is that only one router is in use, other routers must wait for the primary to fail because they can be used. However, Gateway Load Balancing Protocol (GLBP) can use of up to four routers simultaneously. In GLBP, there is still only one virtual IP address but each router has a different virtual MAC address. First a GLBP group must elect an Active Virtual Gateway (AVG). The AVG is responsible for replying ARP requests from hosts/clients. It replies with different virtual MAC addresses that correspond to different routers (known as Active Virtual Forwarders - AVFs) so that clients can send traffic to different routers in that GLBP group (load sharing).

QUESTION 319
Which statement describes VRRP object tracking?

A. It monitors traffic flow and link utilization.
B. It ensures the best VRRP router is the virtual router master for the group.
C. It causes traffic to dynamically move to higher bandwidth links.
D. It thwarts man-in-the-middle attacks.

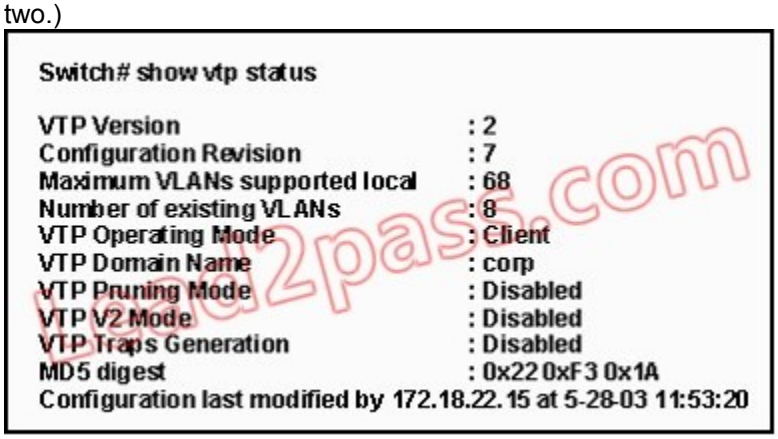
Answer: B
Explanation:
Object tracking is the process of tracking the state of a configured object and uses that state to determine the priority of the VRRP router in a VRRP group

QUESTION 320
What is a global command?

A. a command that is set once and affects the entire router
B. a command that is implemented in all foreign and domestic IOS versions
C. a command that is universal in application and supports all protocols
D. a command that is available in every release of IOS, regardless of the version or deployment status
E. a command that can be entered in any configuration mode

Answer: A
Explanation:
When you enter global configuration mode and enter a command, it is applied to the running configuration file that is currently running in ram. The configuration of a global command affects the entire router.
An example of a global command is one used for the hostname of the router.

QUESTION 321
An administrator is unsuccessful in adding VLAN 50 to a switch. While troubleshooting the problem, the administrator views the output of the show vtp status command, which is displayed in the graphic. What commands must be issued on this switch to add VLAN 50 to the database? (Choose two.)



A. `Switch(config-if)# switchport access vlan 50`
B. `Switch(vlan)# vtp server`
C. `Switch(config)# config-revision 20`
D. `Switch(config)# vlan 50 name Tech`
E. `Switch(vlan)# vlan 50`
F. `Switch(vlan)# switchport trunk vlan 50`

Answer: BE

QUESTION 322
Which of the following IP addresses fall into the CIDR block of 115.64.4.0/22? (Choose three.)

A. 115.64.8.32
B. 115.64.7.64
C. 115.64.6.255
D. 115.64.3.255
E. 115.64.5.128
F. 115.64.12.128

Answer: BCE

QUESTION 323
Which of the following are types of flow control? (Choose three.)

A. buffering
B. cut-through
C. windowing
D. congestion avoidance
E. load balancing

Answer: ACD

QUESTION 324

Refer to the exhibit. After a RIP route is marked invalid on Router_1, how much time will elapse before that route is removed from the routing table?

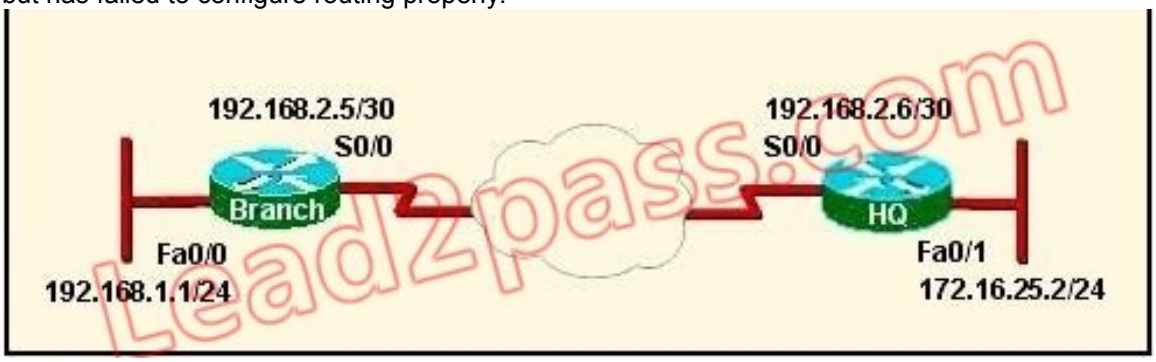
```
Router_1# show ip protocols
Routing Protocol is "rip"
  Sending updates every 30 seconds, next due in 8 seconds
  Invalid after 180 seconds, hold down 180, flushed after 240
  Outgoing update filter list for all interfaces is not set
  Incoming update filter list for all interfaces is not set
  <output omitted>

Router_1#
```


A. 30 seconds
B. 60 seconds
C. 90 seconds
D. 180 seconds
E. 240 seconds

Answer: E

QUESTION 325

Refer to the exhibit. A network associate has configured the internetwork that is shown in the exhibit, but has failed to configure routing properly.



Which configuration will allow the hosts on the Branch LAN to access resources on the HQ LAN with the least impact on router processing and WAN bandwidth?

A.
```
HQ(config)# ip route 192.168.1.0 255.255.255.0 192.168.2.5
Branch(config)# ip route 172.16.25.0 255.255.255.0 192.168.2.6
```

B.
```
HQ(config)# router rip
HQ(config-router)# network 192.168.2.0
HQ(config-router)# network 172.16.0.0
Branch(config)# router rip
Branch(config-router)# network 192.168.1.0
Branch(config-router)# network 192.168.2.0
```

C.
```
HQ(config)# router eigrp 56
HQ(config-router)# network 192.168.2.4
HQ(config-router)# network 172.16.25.0
Branch(config)# router eigrp 56
```

```
Branch(config-router)# network 192.168.1.0
Branch(config-router)# network 192.168.2.4
```

D.
```
HQ(config)# router ospf 1
HQ(config-router)# network 192.168.2.4 0.0.0.3 area 0
HQ(config-router)# network 172.16.25.0 0.0.0.255 area 0
Branch(config)# router ospf 1
Branch(config-router)# network 192.168.1.0 0.0.0.255 area 0
```

Answer: A

QUESTION 326
Which additional configuration step is necessary in order to connect to an access point that has SSID broadcasting disabled?

A. Set the SSID value in the client software to public.
B. Configure open authentication on the AP and the client.
C. Set the SSID value on the client to the SSID configured on the AP.
D. Configured MAC address filtering to permit the client to connect to the AP.

Answer: C

QUESTION 327
What is one reason that WPA encryption is preferred over WEP?

A. A WPA key is longer and requires more special characters than the WEP key.
B. The access point and the client are manually configured with different WPA key values.
C. WPA key values remain the same until the client configuration is changed.
D. The values of WPA keys can change dynamically while the system is used.

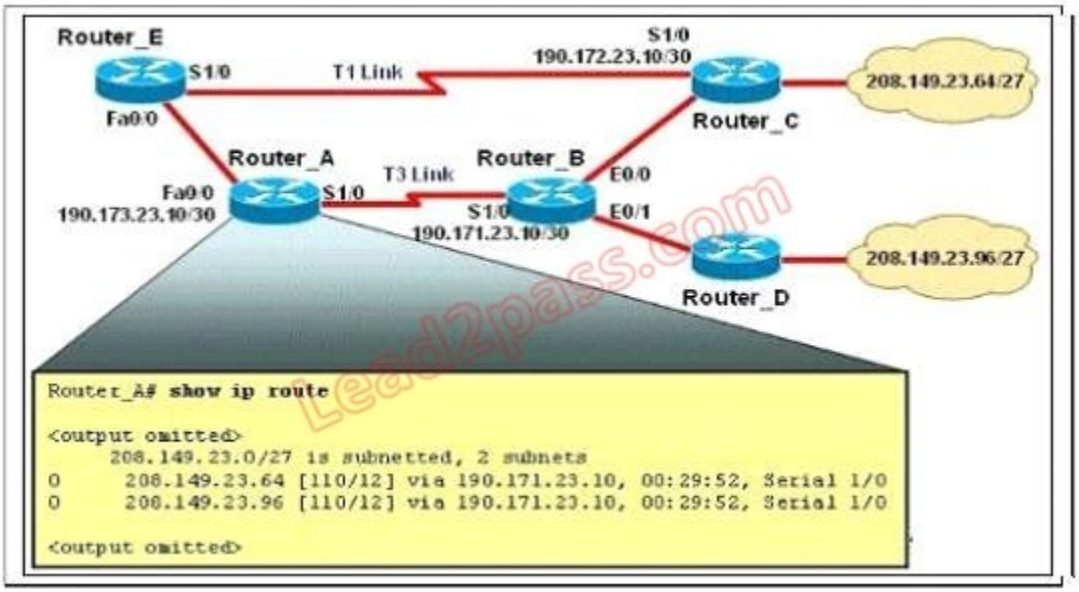
Answer: D

QUESTION 328
All WAN links inside the ABC University network use PPP with CHAP for authentication security. Which command will display the CHAP authentication process as it occur between two routers in the network?

A. `show chap authentication`
B. `show interface serial0`
C. `debug ppp authentication`
D. `debug chap authentication`
E. `show ppp authentication chap`

Answer: C

QUESTION 329
Refer to the exhibit. The network is converged. After link-state advertisements are received from Router_A, what information will Router_E contain in its routing table for the subnets 208.149.23.64 and 208.149.23.96?



A. 208.149.23.64[110/13] via 190.173.23.10, 00:00:00:07, FastEthernet0/0
208.149.23.96[110/13] via 190.173.23.10, 00:00:00:16, FastEthernet0/0
B. 208.149.23.64[110/1] via 190.173.23.10, 00:00:00:07, Serial1/0
208.149.23.96[110/3] via 190.173.23.10, 00:00:00:16, FastEthernet0/0
C. 208.149.23.64[110/13] via 190.173.23.10, 00:00:00:07, Serial1/0
208.149.23.96[110/13] via 190.173.23.10, 00:00:00:16, Serial1/0
208.149.23.96[110/13] via 190.173.23.10, 00:00:00:16, FastEthernet0/0
D. 208.149.23.64[110/13] via 190.173.23.10, 00:00:00:07, Serial1/0
208.149.23.96[110/13] via 190.173.23.10, 00:00:00:16, Serial1/0

Answer: A

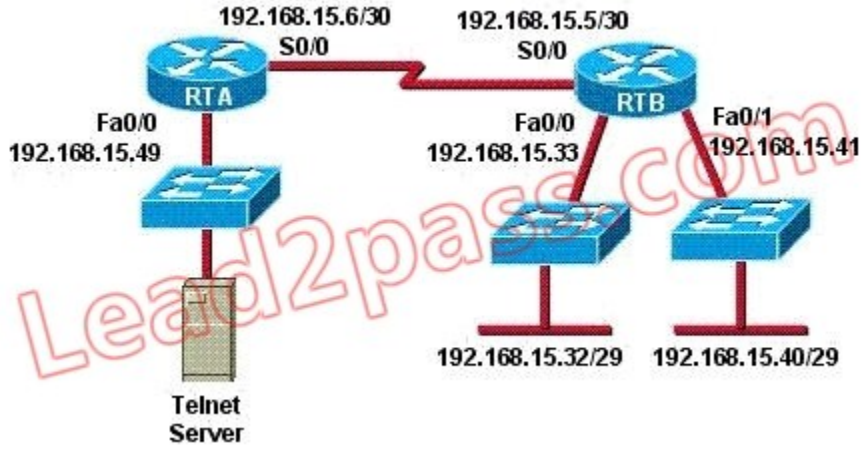
QUESTION 330
What are two characteristics of SSH? (Choose two.)

A. most common remote-access method
B. unsecured
C. encrypted
D. uses port 22
E. operates at the transport layer

Answer: DE

QUESTION 331
Refer to the exhibit. The access list has been configured on the S0/0 interface of router RTB in the outbound direction. Which two packets, if routed to the interface, will be denied? (Choose two.)

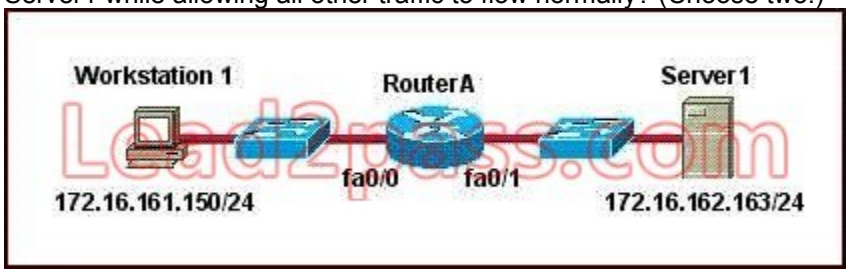
```
access-list 101 deny tcp 192.168.15.32 0.0.0.15 any eq telnet
access-list 101 permit ip any any
```



A. source ip address: 192.168.15.5; destination port: 21
B. source ip address:, 192.168.15.37 destination port: 21
C. source ip address:, 192.168.15.41 destination port: 21
D. source ip address:, 192.168.15.36 destination port: 23
E. source ip address: 192.168.15.46; destination port: 23
F. source ip address:, 192.168.15.49 destination port: 23

Answer: DE

QUESTION 332
Refer to the graphic. It has been decided that Workstation 1 should be denied access to Server1. Which of the following commands are required to prevent only Workstation 1 from accessing Server1 while allowing all other traffic to flow normally? (Choose two.)



A. RouterA(config)# interface fa0/0
RouterA(config-if)# ip access-group 101 out
B. RouterA(config)# interface fa0/0
RouterA(config-if)# ip access-group 101 in
C. RouterA(config)# access-list 101 deny ip host 172.16.161.150 host 172.16.162.163
RouterA(config)# access-list 101 permit ip any any
D. RouterA(config)# access-list 101 deny ip 172.16.161.150 0.0.0.255 172.16.162.163 0.0.0.0
RouterA(config)# access-list 101 permit ip any any

Answer: BC

QUESTION 333
An access list was written with the four statements shown in the graphic.
Which single access list statement will combine all four of these statements into a single statement that will have exactly the same effect?

```
access-list 10 permit 172.29.16.0 0.0.0.255
access-list 10 permit 172.29.17.0 0.0.0.255
access-list 10 permit 172.29.18.0 0.0.0.255
access-list 10 permit 172.29.19.0 0.0.0.255
```

A. access-list 10 permit 172.29.16.0 0.0.0.255
B. access-list 10 permit 172.29.16.0 0.0.1.255
C. access-list 10 permit 172.29.16.0 0.0.3.255
D. access-list 10 permit 172.29.16.0 0.0.15.255
E. access-list 10 permit 172.29.0.0 0.0.255.255

Answer: C

QUESTION 334
A network administrator wants to add a line to an access list that will block only Telnet access by the hosts on subnet 192.168.1.128/28 to the server at 192.168.1.5. What command should be issued to accomplish this task?

A. access-list 101 deny tcp 192.168.1.128 0.0.0.15 192.168.1.5 0.0.0.0 eq 23
access-list 101 permit ip any any
B. access-list 101 deny tcp 192.168.1.128 0.0.0.240 192.168.1.5 0.0.0.0 eq 23
access-list 101 permit ip any any
C. access-list 1 deny tcp 192.168.1.128 0.0.0.255 192.168.1.5 0.0.0.0 eq 21
access-list 1 permit ip any any
D. access-list 1 deny tcp 192.168.1.128 0.0.0.15 host 192.168.1.5 eq 23
access-list 1 permit ip any any

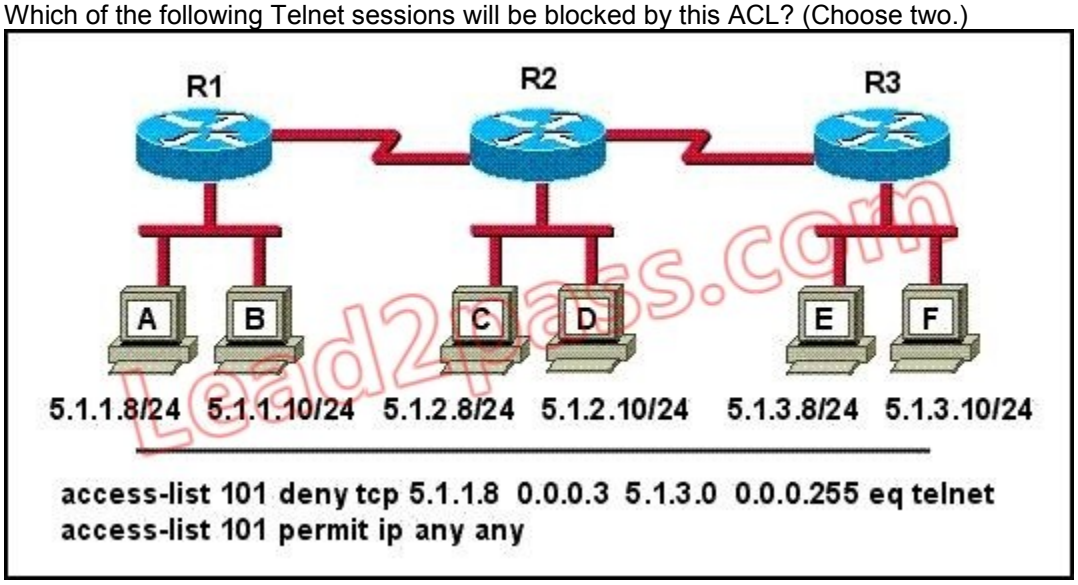
Answer: A

QUESTION 335
As a network administrator, you have been instructed to prevent all traffic originating on the LAN from entering the R2 router.
Which the following command would implement the access list on the interface of the R2 router?

A. access-list 101 in
B. access-list 101 out
C. ip access-group 101 in
D. ip access-group 101 out

Answer: C

QUESTION 336
The access control list shown in the graphic has been applied to the Ethernet interface of router R1 using the ip access-group 101 in command.
Which of the following Telnet sessions will be blocked by this ACL? (Choose two.)



A. from host A to host 5.1.1.10
B. from host A to host 5.1.3.10
C. from host B to host 5.1.2.10
D. from host B to host 5.1.3.8
E. from host C to host 5.1.3.10
F. from host F to host 5.1.1.10

Answer: BD

QUESTION 337
The following access list below was applied outbound on the E0 interface connected to the 192.169.1.8/29 LAN: access-list 135 deny tcp 192.169.1.8 0.0.0.7 eq 20 any access-list 135 deny tcp 192.169.1.8 0.0.0.7 eq 21 any How will the above access lists affect traffic?

A. FTP traffic from 192.169.1.22 will be denied
B. No traffic, except for FTP traffic will be allowed to exit E0
C. FTP traffic from 192.169.1.9 to any host will be denied
D. All traffic exiting E0 will be denied
E. All FTP traffic to network 192.169.1.9/29 will be denied

Answer: D

QUESTION 338
The following configuration line was added to router R1 Access-list 101 permit ip 10.25.30.0 0.0.0.255 any. What is the effect of this access list configuration?

A. ermit all packets matching the first three octets of the source address to all destinations
B. permit all packet matching the last octet of the destination address and accept all source addresses
C. permit all packet matching the host bits in the source address to all destinations

D. permit all packet from the third subnet of the network address to all destinations

Answer: A

QUESTION 339
A default Frame Relay WAN is classified as what type of physical network?

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

Answer: C

QUESTION 340
Which of the following are key characteristics of PPP? (Choose three.)

A. can be used over analog circuits
B. maps Layer 2 to Layer 3 address
C. encapsulates several routed protocols
D. supports IP only
E. provides error correction

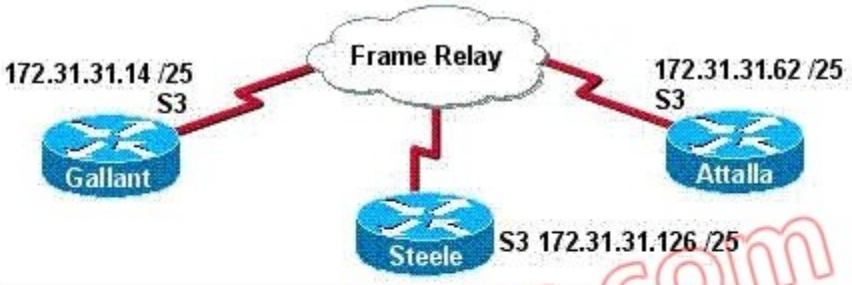
Answer: ACE

QUESTION 341
How should a router that is being used in a Frame Relay network be configured to avoid split horizon issues from preventing routing updates?

A. Configure a separate sub-interface for each PVC with a unique DLCI and subnet assigned to the sub-interface
B. Configure each Frame Relay circuit as a point-to-point line to support multicast and broadcast traffic
C. Configure many sub-interfaces on the same subnet
D. Configure a single sub-interface to establish multiple PVC connections to multiple remote router interfaces

Answer: A

QUESTION 342
The Frame Relay network in the diagram is not functioning properly.
What is the cause of the problem?




```
Gallant#show frame-relay map
Serial3 (up): ip 172.31.31.126 dlci 205 (0xCD,0x30D0), static, broadcast,
        CISCO, status defined, active

Steele#show frame-relay map
Serial3 (up): ip 172.31.31.126 dlci 605 (0x25D,0x94D0), static, broadcast,
        CISCO, status defined, active

Attalla#show frame-relay map
Serial3 (up): ip 172.31.31.62 dlci 509(0x1FD,0x7CD0), static, broadcast,
        CISCO, status deleted
Serial3 (up): ip 172.31.31.14 dlci 502(0x1F6,0x7C60), static, broadcast,
        CISCO, status defined, active
```


A. The Gallant router has the wrong LMI type configured
B. Inverse ARP is providing the wrong PVC information to the Gallant router
C. The S3 interface of the Steele router has been configured with the frame-relay encapsulation ietf command
D. The frame-relay map statement in the Attalla router for the PVC to Steele is not correct
E. The IP address on the serial interface of the Attalla router is configured incorrectly

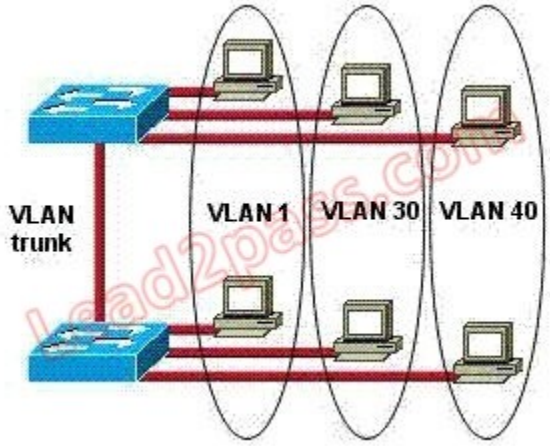
Answer: D

QUESTION 343
As a CCNA candidate, you must have a firm understanding of the IPv6 address structure. Refer to IPv6 address, could you tell me how many bits are included in each filed?

A. 24
B. 4
C. 3
D. 16

Answer: D

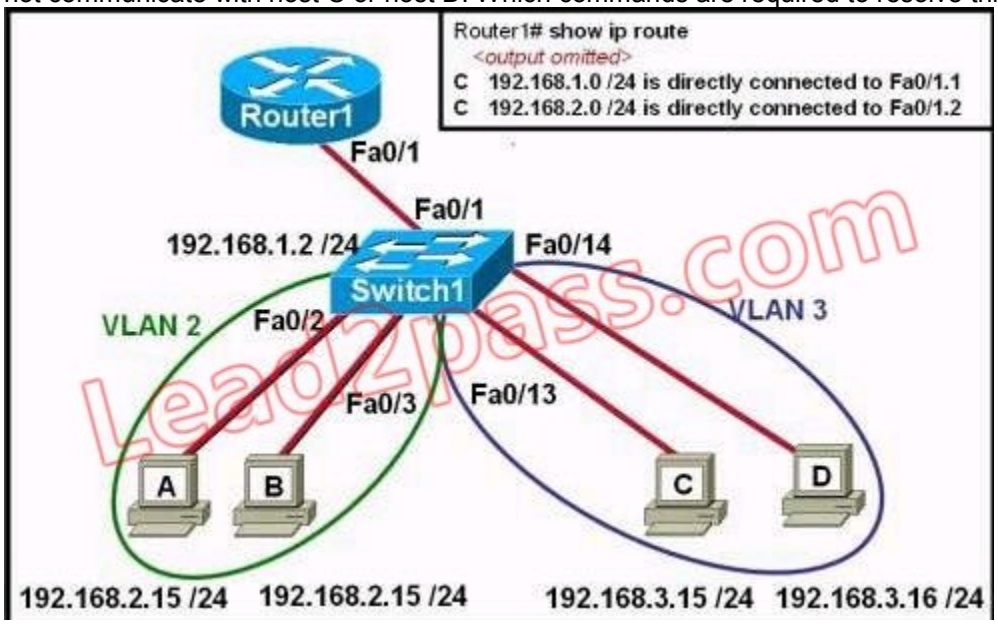
QUESTION 344
Refer to the exhibit. How many broadcast domains exist in the exhibited topology?



A. one
B. two
C. three
D. four
E. five
F. six

Answer: C

QUESTION 345
Refer to the exhibit. The network administrator has created a new VLAN on Switch1 and added host C and host D. The administrator has properly configured switch interfaces FastEthernet0/13 through FastEthernet0/14 to be members of the new VLAN. However, after the network administrator completed the configuration, host A could communicate with host B, but host A could not communicate with host C or host D. Which commands are required to resolve this problem?



A.
```
Router(config)# interface fastethernet 0/1.3
Router(config-if)# encapsulation dot1q 3
Router(config-if)# ip address 192.168.3.1 255.255.255.0
```

B.
```
Router(config)# router rip
Router(config-router)# network 192.168.1.0
Router(config-router)# network 192.168.2.0
Router(config-router)# network192.168.3.0
```

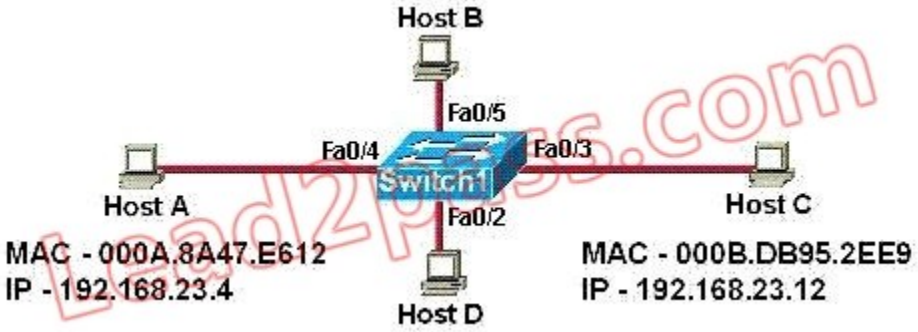
C.
```
Switch1# vlan database
Switch1(vlan)# vtp v2-mode
Switch1(vlan)# vtp domain cisco
Switch1(vlan)# vtp server
```

D.
```
Switch1(config)# interface fastethernet 0/1
Switch1(config-if)# switchport mode trunk
Switch1(config-if)# switchport trunk encapsulation isl
```

Answer: A

QUESTION 346

On a network of one department, there are four PCs connected to a switch, as shown in the following figure: After the Switch1 restarts. Host A (the host on the left) sends the first frame to Host C (the host on the right). What the first thing should the switch do?

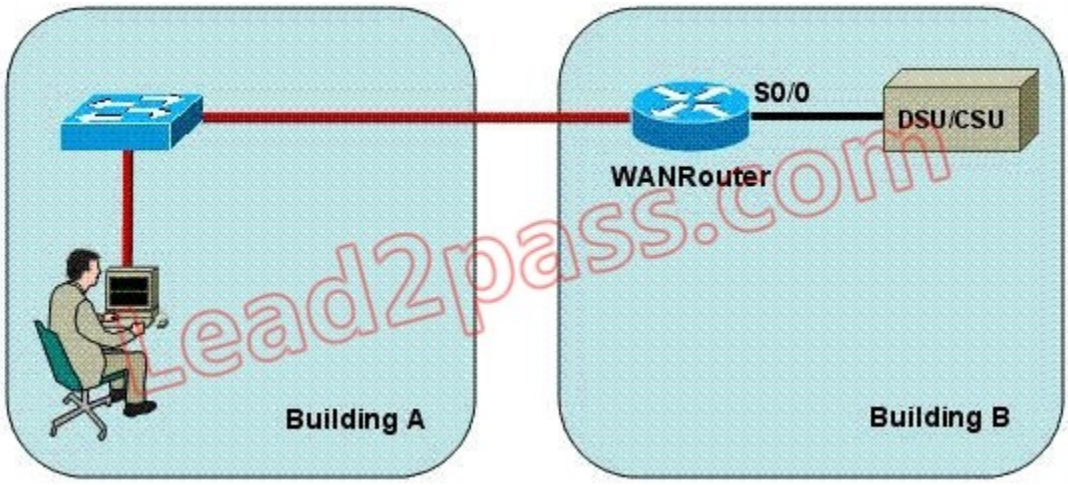


A. Switch1 will add 192.168.23.12 to the switching table.
B. Switch1 will add 192.168.23.4 to the switching table.
C. Switch1 will add 000A.8A47.E612 to the switching table.
D. None of the above

Answer: C

QUESTION 347

Refer to the exhibit. The network administrator is in a campus building distant from Building B. WANRouter is hosting a newly installed WAN link on interface S0/0. The new link is not functioning and the administrator needs to determine if the correct cable has been attached to the S0/0 interface. How can the administrator accurately verify the correct cable type on S0/0 in the most efficient manner?



A. Telnet to WANRouter and execute the command show interfaces S0/0
B. Telnet to WANRouter and execute the command show processes S0/0
C. Telnet to WANRouter and execute the command show running-configuration
D. Telnet to WANRouter and execute the command show controller S0/0
E. Physically examine the cable between WANRouter S0/0 and the DCE.
F. Establish a console session on WANRouter and execute the command show interfaces S0/0

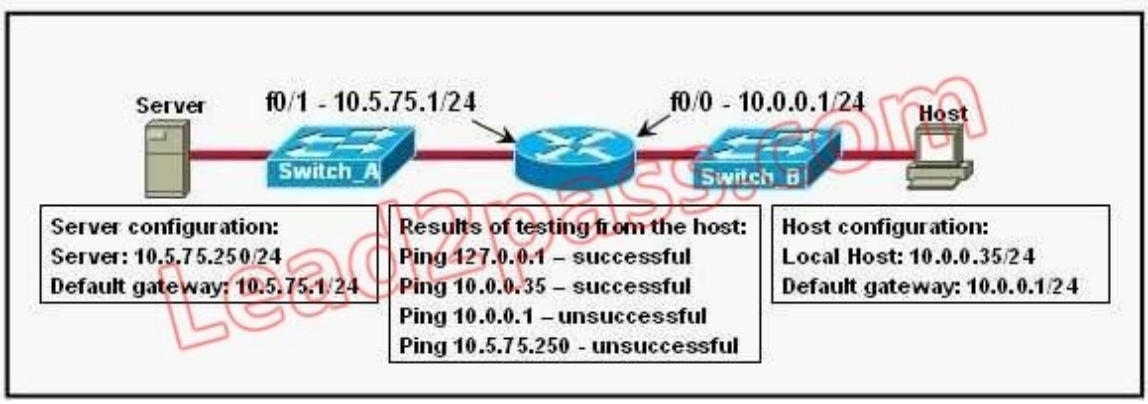
Answer: D

QUESTION 348
While troubleshooting a connectivity issue from a PC you obtain the following information:

```
Local PC IP address: 10.0.0.35/24
Default Gateway: 10.0.0.1
Remote Sever: 10.5.75.250/24
```

You then conduct the following tests from the local PC:

```
Ping 127.0.0.1 - Successful
Ping 10.0.0.35 - Successful
Ping 10.0.0.1 - Unsuccessful
Ping 10.5.75.250 - Unsuccessful
```



What is the underlying cause of this problem?

A. A remote physical layer problem exists.
B. The host NIC is not functioning.

C. TCP/IP has not been correctly installed on the host.
D. A local physical layer problem exists.

Answer: D

QUESTION 349
A network administrator is troubleshooting the OSPF configuration of routers R1 and R2. The routers cannot establish an adjacency relationship on their common Ethernet link. The graphic shows the output of the show ip ospf interface e0 command for routers R1 and R2.

```
R1:  Ethernet0 is up, line protocol is up
       Internet address 192.168.1.2/24, Area 0
       Process ID 1, Router ID 192.168.31.33, Network Type BROADCAST, Cost: 10
       Transmit Delay is 1 sec, State DR, Priority 1
       Designated Router (ID) 192.168.31.33, Interface address 192.168.1.2
       No backup designated router on this network
       Timer intervals configured, Hello 5, Dead 20, Wait 20, Retransmit 5
-------------------------------------------------------------------------
R2:  Ethernet0 is up, line protocol is up
       Internet address 192.168.1.1/24, Area 0
       Process ID 2, Router ID 192.168.31.11, Network Type BROADCAST, Cost: 10
       Transmit Delay is 1 sec, State DR, Priority 1
       Designated Router (ID) 192.168.31.11, Interface address 192.168.1.1
       No backup designated router on this network
       Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5
```

Based on the information in the graphic, what is the cause of this problem?

A. The OSPF area is not configured properly.
B. The priority on R1 should be set higher.
C. The cost on R1 should be set higher.
D. The hello and dead timers are not configured properly.
E. A backup designated router needs to be added to the network.
F. The OSPF process ID numbers must match.

Answer: D

QUESTION 350
This graphic shows the results of an attempt to open a Telnet connection to router ACCESS1 from router Remote27.

```
Remote27#
Remote27#telnet access1
Trying ACCESS1 (10.0.0.1)... Open


Password required, but none set

[Connection to access1 closed by foreign host]
Remote27#
```

Which of the following command sequences will correct this problem?

A.
```
ACCESS1(config)# line console 0
ACCESS1(config-line)# password cisco
```
B.
```
Remote27(config)# line console 0
Remote27(config-line)# login
Remote27(config-line)# password cisco
```
C.
```
ACCESS1(config)# line vty 0 4
ACCESS1(config-line)# login
ACCESS1(config-line)# password cisco
```
D.
```
Remote27(config)# line vty 0 4
Remote27(config-line)# login
Remote27(config-line)# password cisco
```
E.
```
ACCESS1(config)# enable password cisco
```
F.
```
Remote27(config)# enable password cisco
```

Answer: C