Refer to diagram 1. Which set of commands should you use to configure RIP on router B to advertise all attached networks.

- RouterB(config)# router rip
  RouterB(config)# network 192.168.2.0
  RouterB(config)# network 192.168.4.0
  RouterB(config)# network 203.13.3.0

- RouterB(config)# router rip
  RouterB(config-router)# network 192.168.2.0
  RouterB(config-router)# network 192.168.4.0
  RouterB(config-router)# network 203.13.3.0

- RouterB(config)# router rip
  RouterB(config-router)# network 192.168.2.0 255.255.255.0
  RouterB(config-router)# network 192.168.4.0 255.255.255.0
  RouterB(config-router)# network 203.13.3.0 255.255.255.0

- RouterB# config router rip
  RouterB(config-router)# network 192.168.2.0
  RouterB(config-router)# network 192.168.4.0
  RouterB(config-router)# network 203.13.3.0

Refer to diagram 1. Router D sends an update to Router B with the information that the link to network 202.13.4.0 is down. Which of the following is true?

- Router B will include the information in its updates to routers A, C and D.
- Router B will include the information in its updates to routers A and D.
- **Router B will include the information in its updates to routers A and C.**
- Router B will not include the information in its updates.
Refer to diagram 1.
All routers are using RIP. Router B’s routing table shows a path to network 202.23.4.0 with a hop count of 1. Router B sends a routing update to Router C. What happens to the hop count for network 202.23.4.0?

- It is shown in Router C’s routing table just as it was in Router B’s.
- It is decremented by 1 and shown in Router C’s routing table.
- It is incremented by 1 and shown in Router C’s routing table.
- Router C will ignore it and calculate its own hop count.
- Router C will not show the route to 202.23.4.0 in its routing table.

Refer to diagram 1.
RIP is used as the routing protocol on all routers. A packet is sent from network 192.168.1.0 to network 202.13.4.0. Will the packet pass through router C?

- No. There is a path with a lower hop count that avoids router C.
- Perhaps. RIP will perform load balancing among all available routes.
- Perhaps. It depends on the bandwidths of the serial links.
- Yes. Router C is part of the autonomous system.

Refer to diagram 1.
RIP is used on all routers. The route to network 202.13.4.0 goes down. How will Router D show this in its routing updates?

- It will set the hop count to 255
- It will set the hop count to 15
- It will set the hop count to 16
- It will set the administrative distance to 255
- It will leave the network out of its next routing update

An administrator gives the commands:

```
RouterA(config)# router rip
RouterA(config-router)# no network 192.168.1.0
```

What is the effect of these commands?

- Router A will no longer run RIP
- Router A will not accept packets from network 192.168.1.0
- The connection to 192.168.1.0 will be administratively down
- Router A will not advertise network 192.168.1.0 in its routing updates

An administrator wants to disable RIP routing before enabling EIGRP. Which command will disable RIP?

- RouterA(config)# no router rip
- RouterA# no debug rip
- RouterA(config)# disable router rip
- RouterA(config)# router rip end
The document contains the following questions and commands:

- **RouterA(config)# router rip shutdown**

What command would you give to display the contents of the routing table?
- **RouterA# show routing table**
- **RouterA# show routes**
- **RouterA# show ip route**
- **RouterA(config)# show routing table**
- **RouterA(config)# show routes**
- **RouterA(config)# show ip route**

An administrator displays the routing table and finds that it includes the following information:

```
192.168.1.0/24 [120/3] via 203.13.3.2, 00:00:10, serial 0/0
```

When is the next routing update due, assuming that all default values are used?
- In 10 seconds
- In 20 seconds
- In 30 seconds
- In 50 seconds
- In 80 seconds
- In 90 seconds

23

Which commands could you use to find the administrative distance of the routing protocol and when the last update was received or when the next is due? (Choose 2)
- **RouterA# show ip route**
- **RouterA(config)# show ip route**
- **RouterA# show ip protocols**
- **RouterA(config)# show ip protocols**
- **RouterA# show routing updates**
- **RouterA(config)# show routing updates**
- **RouterA# router rip**
- **RouterA(config)# router rip**

What command should you give in order to configure a static route to network 192.168.4.0 via a next-hop router with interface 192.168.2.1?
- **Router(config)# ip static 192.168.4.0 255.255.255.0 192.168.2.1**
- **Router(config)# ip route 192.168.4.0 255.255.255.0 192.168.2.1**
- **Router(config)# ip static route 192.168.4.0 255.255.255.0 192.168.2.1**
- **Router(config-router)# ip 192.168.4.0 255.255.255.0 192.168.2.1**

What command should you give in order to configure a default route via a next-hop router with interface 192.168.4.1?
- **Router(config)# ip static 0.0.0.0 255.255.255.255 192.168.4.1**
- **Router(config)# ip route 0.0.0.0 0.0.0.0 192.168.4.1**
- **Router(config)# ip static route 0.0.0.0 255.255.255.255 192.168.4.1**
- **Router(config)# static route 0.0.0.0 0.0.0.0 192.168.4.1**
Router(config-router)# ip 0.0.0.0 0.0.0.0 192.168.4.1

Which statements are true about the command `debug ip rip`? (Choose 3)
- It is entered in global configuration mode
- It is entered in router configuration mode
- It is entered in privileged exec mode
- It shows routing updates as they are sent and received
- It shows updates that are received, but not those that are sent
- It should be left on at all times so that you can check the working of RIP
- It should be switched off after use to conserve resources

RIP discovers four routes to a destination network, and all of them have the same number of hops. What will the router do with packets addressed to that network?
- Drop them
- Send them all by the fastest route
- Send them all by the route that was discovered first
- Use load balancing, sending packets by each route in turn
- Use load balancing, but send more packets on the faster routes
- Split each packet into four and send the pieces by different routes

Diagram 2

See Diagram 2. The two routers are running RIP v1. What will router A advertise to router B?
- 172.16.2.0 and 172.16.3.0
- 172.16.2.0
- 172.16.0.0
- 172.0.0.0

See Diagram 2. Which address should you NOT use when addressing the LANs connected to Router B?
- 172.16.4.0/24
- 172.17.3.0/24
- 172.31.255.0/24
- 192.168.1.0/24
- 192.168.128.0/24
See Diagram 2. Which is the correct way of configuring Router A to use RIP v1?

- A(config)# router rip
  A(config-router)# network 172.16.2.0
  A(config-router)# network 172.16.3.0
  A(config-router)# network 10.10.10.0
- A(config)# router rip
  A(config-router)# network 172.16.0.0
  A(config-router)# network 10.0.0.0
- A(config)# router rip
  A(config-router)# network 172.16.2.0
  A(config-router)# network 172.16.3.0
- A(config)# router rip
  A(config-router)# network 172.16.0.0
  A(config-router)# network 10.10.0.0

A router has network 192.168.5.0 connected to interface FastEthernet 0/0. How could you stop routing updates from being sent through interface FastEthernet 0/0 while still including 192.168.5.0 in updates?

- A(config)# no router rip
- A(config)# int fa 0/0
  A(config-if)# no router rip
- A(config)# router rip
  A(config-router)# no network 192.168.5.0
- A(config)# router rip
  A(config-router)# passive interface fa0/0
- A(config)# router rip
  A(config-router)# no interface fa0/0

Which command will let you watch RIP updates being sent and received?

- show ip route
- show ip protocols
- show ip updates
- debug rip
  
  - debug ip rip
- debug rip updates

A routing table includes the following line. What is the meaning of the 4 in [120/4]?

R 192.168.1.0/24 [120/4] via 192.168.4.1, 00:00:20, Serial0/0

- It is the routing metric.
- It is the administrative distance.
- It is the time in seconds since the last routing update.
- It is a way of writing the subnet mask.
Which routing algorithm does RIP v1 use?

- DUAL
- Shortest path first
- Bellman-Ford
- Dijkstra

Where would RIP v1 would be a suitable choice of routing protocol?

- On networks where use of bandwidth is a major issue.
- On small networks where all subnets use the same subnet mask.
- On large hierarchical networks where subnetting is not used.
- On small networks where VLSM is used to subnet a class C network.

Which statement is true of RIP v1?

- RIP v1 is one of the oldest routing protocols and is now no longer used.
- RIP v1 can only be used on networks containing fewer than 15 routers.
- RIP v1 needs routers with fast processors and plenty of RAM.
- RIP v1 does not send subnet mask information in its routing updates.
- RIP v1 is preferred for efficient networks because it used little bandwidth,
- RIP v1 converges more quickly than other routing protocols.

An administrator is configuring RIP v1 and enters the commands network 172.16.4.0 and network 172.16.5.0 by mistake instead of network 172.16.0.0. What will appear in the configuration when the administrator gives the show run command?

- The network command will not be shown because the router will reject the command.
- The configuration will show network 172.16.4.0 and network 172.16.5.0 but these networks will not be included in updates.
- The configuration will show network 172.16.4.0 because the router will summarize using /25 to include both networks.
- The configuration will show network 172.16.0.0 because the router will summarize to the class boundary.
- The configuration will show network 172.0.0.0 because the router will summarize to the first octet.

A group of networks with 6 routers are connected to an ISP by a single link from a gateway router. What is the preferred way of routing across the link?

- Configure RIP v1 between the gateway router and the ISP.
- Configure a static route on the gateway router to the ISP address. The ISP will have a static route back to the gateway router.
- Configure a default route to the ISP on every router. The ISP will have a static route back to each network.
- Configure a default route to the ISP on the gateway router and use the `default information originate` command to propagate the route. The ISP will have a summarized static route back to the group of networks.
- Configure a default route to the ISP on the gateway router and configure a static route to the ISP on the other routers. The ISP will have a default route back to the gateway router.

Which command will show whether a router is sending RIP v1 or RIP v2 updates and whether any interfaces have been configured as passive?

- Show ip route
- `Show ip protocols`
- Show ip rip
- Show version
- Debug ip rip

How are RIP routing updates sent?

- They are layer 3 messages and are encapsulated directly into frames.
- They are encapsulated into TCP segments.
- **They are encapsulated into UDP segments.**
- They are encapsulated into SNMP segments.

What is the default setting of the RIP update timer?

- 30 seconds
- 60 seconds
- 120 seconds
- 180 seconds
- 240 seconds

What is the default setting of the RIP invalid timer?

- 30 seconds
- 60 seconds
- 120 seconds
- **180 seconds**
- 240 seconds

What is the default setting of the RIP flush timer?

- 30 seconds
- 60 seconds
- 120 seconds
- 180 seconds
- **240 seconds**