CCNA2 Chapter 9 Practice

What is EIGRP?

- A classful distance vector routing protocol
- **A classless distance vector routing protocol**
- A classful link state routing protocol
- A classless link state routing protocol

What administrative distance is the default for an internal EIGRP route?

- 1
- 5
- 20
- **90**
- 100
- 110
- 120
- 170

What administrative distance is the default for an external EIGRP route?

- 1
- 5
- 20
- 90
- 100
- 110
- 120
- **170**

What administrative distance is the default for an EIGRP summary route?

- 1
- 5
- 20
- 90
- 100
- 110
- 120
- 170
What information must be included in EIGRP configuration commands in order to distinguish between possible different instances of EIGRP?

- **Autonomous System number**
- Administrative Distance number
- Metric number
- Hostname of router

What must neighbour routers have in common in order to form an adjacency for EIGRP routing?

- Same hello interval
- Same hello time
- **Same AS number**
- Same network commands

Which of the following is not a table used by EIGRP?

- Neighbor table
- Routing table
- **Network table**
- Topology table

What does EIGRP put in the routing table?

- Feasible successor routes
- **Successor routes**
- Backup routes
- All known routes

What sort of route is regarded by DUAL as passive?

- A route that is down
- A route that is not sending updates
- A route that is being recalculated
- **A route that can be used**

Where would you look to find a route marked as A for active or P for passive?

- Routing table
- **Topology table**
- Neighbor table
- Running configuration
Which routes does EIGRP store as backup routes in case the current best routes become unavailable?

- Successor routes
- Feasible routes
- **Feasible successor routes**
- Feasible condition routes

What is the reported distance of a route?

- The metric of the route as calculated by the local router
- *The metric of the route as calculated by a neighbour router*
- The number of hops to the destination starting from a neighbour
- The physical distance between neighbouring routers

What is an autonomous system?

- *A group of networks under a common administration for routing purposes.*
- A group of networks running the same routing protocol.
- A group of networks that are not connected to the Internet.
- A group of networks that are all subnets of the same classful network.

What will router A do if the link to its LAN goes down?

- Send an update to routers B and C.
- *Send an update to router B.*
- Wait for its next scheduled update and include the information.
- Recalculate all its routes.

What routes are saved in the topology table?

- The best route to each network.
- All the routes that have been discovered.
- Feasible successor routes.
- *Successor and feasible successor routes.*
You are configuring EIGRP on a router, you enter the command

**network 172.16.3.0 255.255.255.0**

And the router accepts it. What will appear in the configuration if you give the **show run** command?

- network 172.16.3.0 255.255.255.0
- network 172.16.3.0 0.255.255.255
- **network 172.16.3.0 0.0.0.255**
- network 172.16.3.0

What command would you give to configure EIGRP on a router using AS number 2?

- **Router eigrp 2**
- Router ip eigrp 2
- Router eigrp as 2
- Router eigrp process 2

How are EIGRP update packets sent?

- Broadcast
- Multicast
- Unicast
- **Sometimes multicast and sometimes unicast**

What does EIGRP use RTP for?

- To calculate best routes
- To search the routing table
- **To provide reliable or unreliable transmission as required**
- To provide layer 3 encapsulation instead of using IP

What is the advantage of EIGRP storing feasible successor routes as well as successor routes?

- It makes the routing table smaller by storing some of the routes elsewhere
- It means that there is always a backup route to every network
- It gives the router a greater choice in the selection of routes, allowing load balancing
- **It saves processor time by reducing the number of times that routes must be calculated**
Which is not a metric used by EIGRP?

- Load
- Bandwidth
- Delay
- Mtu
- Reliability

Which of these are EIGRP metrics that are measured on the link so that dynamic values can be used? (Choose 2)

- Load
- Bandwidth
- Delay
- Mtu
- Reliability

What default value does EIGRP use for the bandwidth calculations for a serial link?

- 1024 Kbps
- 2048 Kbps
- 10000 Kbps
- 100000 Kbps

What are the two numbers in brackets?

- The feasible distance and the successor distance
- The feasible distance and the reported distance
- The administrative distance and the routing metric
- The feasible distance and the autonomous system number

What is likely to happen if the bandwidth command is wrongly configured on a router interface and the router is running EIGRP?

- The speed of transmission on the link will be wrong
- The router will not become adjacent with an EIGRP neighbour
- **The router may choose suboptimal paths**
- The router will not be able to calculate its metrics
A router running EIGRP finds 3 routes to the same destination.  
Route A has FD 3523840 and RD 3011840  
Route B has FD 2297856 and RD 39260  
Route C has FD 3558000 and RD 2115200  
What will it do?  

- Put route B in its routing table and routes A and B in its topology table  
- Put route B in its routing table and routes A and C in its topology table  
- **Put route B in its routing table and routes B and C in its topology table**  
- Put route B in its routing table and routes A, B and C in its topology table  

Why might an administrator give the **no auto-summary** command on a router running EIGRP? (Choose 2)  

- To allow routing between discontiguous networks.  
- To allow packets for unknown subnets to be sent on a default route.  
- To remove any manually configured supernet routes  
- To enable support for VLSM  

An advantage of EIGRP using bounded, partial updates is:  

- It reduces the size of the routing tables  
- It reduces the number of routers that have to become adjacent  
- **It limits the use of bandwidth**  
- It avoids the need to send hello messages  

Why would a network command include a wildcard mask?  

- To allow the use of VLSM  
- **To include only some subnets of a classful network in routing updates**  
- To create summary routes  
- To allow the networks to be included in updates by more than one instance of EIGRP  

What wildcard mask is the inverse of subnet mask 255.255.255.252?  

- **0.0.0.3**  
- 0.0.0.15  
- 0.0.0.252  
- 0.0.0.255