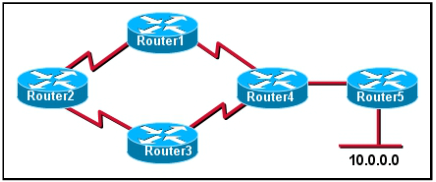
**Chapter 4 - Quiz**

1. Which four statements are true regarding distance vector routing protocols? (Choose four.)
2. Hop counts can be used for path selection.
3. They scale well.
4. Routing updates are broadcast at intervals.
5. EIGRP can do unequal-cost load balancing.
6. RIP v1 multicasts its routing updates.
7. RIP sends its entire routing table to directly connected neighbors.
8. Which three conditions cause distance vector routing protocols to send routing table updates? (Choose three.)
9. the hold-down timer expires
10. a change occurs in the network topology
11. the update timer value expires
12. a triggered update is received from another router
13. a packet is received that is destined for an unknown network
14. no routing table changes for 30 minutes
15. What are two characteristics of an EIGRP update? (Choose two.)
16. includes all EIGRP routes
17. includes the full routing table
18. independent of architecture
19. only triggered for route topology changes
20. broadcasted to affected neighbors
21. bounded to affected next hop routers
22. What feature was added to RIP to help with synchronization errors?
23. hold -down timer
24. RIP\_JITTER
25. RIP\_DELAY
26. jitter control
27. Which two timers are used for RIP? (Choose two.)
28. invalid
29. refresh
30. flush
31. deadlink
32. hello
33. Which statement is true concerning the advantages of a distance vector protocol?
34. Periodic updates speed up convergence.
35. Convergence times make routing loops impossible.
36. Ease of implementation makes configuration simple.
37. They work well in complex networks.
38. Their convergence times are faster than link-state routing protocols.
39. Which mechanism can be used to avoid a count to infinity loop?
40. split horizon
41. route poisoning
42. hold-down timer
43. triggered update
44. split horizon with poison reverse
45. Refer to the following topology description to answer the question. The network shown is running RIP. What mechanism will keep Router4 from sending updates about the 10.0.0.0 network back to Router5?



1. split horizon
2. poison reverse
3. route poisoning
4. hold-down timer
5. maximum hop count
6. What allows distance vector protocols to avoid routing loops by advertising a metric of infinity?
7. split horizon
8. route poisoning
9. hold-down timer
10. maximum hop count
11. time to live (TTL) field of IP header
12. Which field in the IP header ensures that packets do not loop endlessly on a network?
13. CRC
14. TOS
15. TTL
16. Checksum
17. Match the loop-preventing mechanism to the corresponding function.

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| 1. split horizon | ⬄ | 1. Routes learned through an interface are not advertised out that same interface. |
| 1. route poisoning | ⬄ | 1. Routes learned through an interface are advertised back out the same interface as unreachable. |
| 1. triggered update | ⬄ | 1. Topology changes are immediately sent to adjacent routers. |
| 1. hold-down timer | ⬄ | 1. It allows time for topology changes to travel through the entire network. |