

1. What is CIDR? What are the advantages of CIDR?

2. What mask would be the most efficient for a point-to-point connection?

3. Summarize the following groups of addresses:
 - a. 192.168.8.0/30
192.168.8.4/30
192.168.8.8/30 _____
192.168.8.16/29

 - b. 192.168.16.0/23
192.168.18.0/24 _____
192.168.19.0/24

 - c. 192.168.20.0/22
192.168.24.0/22 _____
192.168.28.0/22

 - d. Can you summarize all of the addresses above?

4. What Routing protocols are considered classless?

5. What is VLSM?

6. What are the advantages of using VLSM?

7. What classful networks are summarized with the following addresses:
 - a. 192.168.0.0/20

 - b. 192.168.64.0/20

 - c. 192.168.32.0/22

8. Given the following hosts, identify the appropriate subnet mask that conserves host addresses.
 - a. 30 hosts _____
 - b. 60 hosts _____
 - c. 500 hosts _____
 - d. 120 hosts _____
 - e. 2 hosts _____

9. If 4 bits are borrowed from a class C network, how many useable hosts are there?

10. Which routing protocols support VLSM?

11. Given the following subnet and hosts, how many unused hosts will there be in each subnetwork:
 - a. 10.1.1.0/26 with 12 hosts
 - b. 10.1.1.0/24 with 100 hosts
 - c. 10.5.16.0/20 with 1000 hosts

12. What is the broadcast address for the each of the following:
 - a. 192.168.1.65/27
 - b. 10.1.5.0/24
 - c. 172.16.5.0/26

13. What is a supernet?

14. Identify AND DEFINE some primary network connectivity testing commands.