

4. Given the IP address of 190.1.42.3 and the mask of 255.255.255.0:
 - a. What class network is this?

 - b. What is the network number?

 - c. What is the host number?

5. Given the IP address of 140.1.1.1 and the mask of 255.255.255.248:
 - a. What class network is this?

 - b. What is the network number?

 - c. What is the host number?

6. Given the IP address of 167.88.99.66 and the mask of 255.255.255.192:
 - a. What class network is this?

 - b. What is the network number?

 - c. What is the host number?

7. Your company was given a network ID of 150.150.0.0 and you need to divide it into multiple subnets. You need 600 host IDs on each subnet, with the largest amount of subnets available. Find the subnet mask required.

8. Your company was given a network ID of 150.150.0.0 and you need 8 subnets, with the largest amount of hosts available. Find the subnet mask required.

9. Your company was given a network ID of 206.17.45.0 and you need to divide it into multiple subnets. You need 25 host IDs on each subnet, with the largest amount of subnets available. Find the subnet mask required.

10. You have a Class A network address. Currently you have 60 departments (each requiring its own subnetwork), but the company is expecting to expand to add 40 new departments in the next 5 years. What subnet mask would you assign and why?

11. You have a Class C network address of 206.17.19.0 with four subnets, how many hosts can you have per subnet (answer in the 2^n notation)?