

1 – Assume that 4 bits have been borrowed. Identify the subnet addresses (choose 3):

- a 192.168.14.8
- b 192.168.14.16
- c 192.168.14.24
- d 192.168.14.32
- e 192.168.14.148
- f 192.168.14.208

2 – Assuming a subnet mask of 255.255.224.0, which of the following would be a valid host address? (choose 3)

- a 124.78.103.0
- b 125.67.32.0
- c 125.78.160.0
- d 126.78.48.0
- e 176.55.96.0
- f 186.211.100.0

3 – Which of the following are private IP addresses? (choose 3)

- a 172.168.33.1
- b 10.35.66.70
- c 192.168.99.5
- d 172.18.88.90
- e 192.169.77.89
- f 127.33.55.16

4 – The router reads each bit to determine the class of an address. Which of the following binary numbers would the router identify as a public class A address? (choose 3)

- a 00001010.10101100.11001100.00000111
- b 00011111.11110011.11111111.00111011
- c 01011101.11100001.11001100.11011011
- d 10000000.11111000.11000111.11110011
- e 00010111.11011011.11000001.11001100

5 – What is the maximum number of subnets that can be assigned to networks when using the address 172.16.0.0 with a subnet mask of 255.255.240.0 ?

- a 16
- b 32
- c 30
- d 14
- e this is an invalid subnet mask for the Network

6 – Which network mask should you place on a class C address to accommodate a user requirement of two sub networks with a maximum of 35 hosts on each network?

- A 255.255.255.192
- B 255.255.255.224
- C 255.255.255.240
- D 255.255.255.248

7 – How many valid host IP addresses are available on the following network/subnetwork? 198.197.196.16/30

- a 2
- b 30
- c 254
- d 16,382
- e 65,534

8- Given an IP address of 172.16.2.160 and a subnet mask of 255.255.255.192, to which subnet does the host belong?

- A 172.16.2.32
- B 172.16.2.64
- C 172.16.2.96
- D 172.16.2.128
- E 172.16.2.192

9 – Given the following IP address from the class B address range:
172.35.21.12

Your network plan requires no more than 126 hosts on a subnet that includes this address. When you configure the IP address in Cisco IOS software, which value should you use as the subnet mask?

- A 255.255.0.0
- B 255.255.128.0
- C 255.255.255.128
- D 255.255.255.252

10 - You are given an ip adress 132.15.136.2/18 what subnet is the host ip on ?

- A 132.15.136.0
- B 132.15.128.0
- C 132.15.192.0
- D 132.15.64.0

11- In order to have 5 subnets and 17 hosts on each subnet, how many bits of subnetting will you use on the class B address 162.13.0.0/16 ?

- A 255.255.128.0
- B 255.255.224.0
- C 255.255.240.0
- D 255.255.248.0