

## Subnetting Task

1. If a host on a network has the address 172.16.45.14/30, what is the address of the sub-network to which this host belongs?  
A. 172.16.45.0  
B. 172.16.45.4  
C. 172.16.45.8  
**D. 172.16.45.12**  
E. 172.16.45.18
2. What is the IP address range for the first octet in a class B address, in binary form?  
A. 10000000-11101111  
B. 11000000-11101111  
**C. 10000000-10111111**  
D. 10000000-11111111  
E. 11000000-10111111
3. Which two of the addresses below are available for host addresses on the subnet 192.168.15.19/28?  
(Select two answer choices)  
**A. 192.168.15.17**  
B. 192.168.15.14  
**C. 192.168.15.29**  
D. 192.168.15.16  
E. 192.168.15.31  
F. None of the above
4. You have a Class C network, and you need ten subnets.  
You wish to have as many addresses available for hosts as possible. Which one of the following subnet masks should you use?  
A. 255.255.255.192  
B. 255.255.255.224  
**C. 255.255.255.240**  
D. 255.255.255.248  
E. None of the above

**5. How many sub-networks and hosts are available per subnet if you apply a /28 mask to the 210.10.2.0 class C network?**

- A. 30 networks and 6 hosts.
- B. 6 networks and 30 hosts.
- C. 8 networks and 32 hosts.
- D. 32 networks and 18 hosts.
- E. 16 networks and 14 hosts.**
- F. None of the above

**6. The Certkiller network was assigned the Class C network 199.166.131.0 from the ISP. If the administrator at Certkiller were to subnet this class C network using the 255.255.255.224 subnet mask, how many hosts will they be able to support on each subnet?**

- A. 14
- B. 16
- C. 30**
- D. 32
- E. 62
- F. 64

**7. What is the subnet for the host IP address 201.100.5.68/28?**

- A. 201.100.5.0
- B. 201.100.5.32
- C. 201.100.5.64**
- D. 201.100.5.65
- E. 201.100.5.31
- F. 201.100.5.1

**8. Your network uses the 172.12.0.0 class B address. You need to support 459 hosts per subnet, while accommodating the maximum number of subnets. Which mask would you use?**

- A. 255.255.0.0.
- B. 255.255.128.0.
- C. 255.255.224.0.
- D. 255.255.254.0.**