Question 2:

How many subnets and hosts are provided by the network address 172.16.0.0/19 ?

A 7 subnets with 30 hosts each
B 8 subnets with 8190 hosts each
C 8 subnets with 2046 hosts each
D 7 subnets with 2046 hosts each

Answer: B

Explanation:

Default subnet masks:
Class A: 255.0.0.0
Class B: 255.255.0.0
Class C: 255.255.255.0

The netmask / CIDR address of 172.16.0.0/19 is 255.255.224.0. According to the table above, this is a class B address. A class B address has 3 subnet bits which can provide 13 host bits. This means that the address 172.16.0.0/19 provides 8 subnets, with each subnet having 8190 hosts.

Question 1:

You need to subnet a network that has 5 subnets, and each subnet should have at least 16 hosts. Which 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

Answer: B

Explanation:

The answer is B because the mask 255.255.255.224 provides 8 subnets, and each subnet has 30 hosts. The other answers do not meet the specified requirements eg: Answer C, with mask 255.255.255.240 provides 16 subnets, with each subnet having 14 hosts, and this is not enough.