Question 1:

You are given a class C network block of 192.168.50.0.

1. How many subnet bits are required to create 14 subnets?
2. What is the maximum number of hosts per subnet?
3. What is the default mask for the given network?
4. What is the subnet mask you would use for your design?
5. List all the subnet IDs along with broadcast address and the valid IP range.
6. Can we add more subnets in the future to the existing network without changing the network design? If so, what are your observations?

Question 2:

You are given a class B network block of 160.10.0.0.

1. How many subnet bits are required to create 17 subnets?
2. What is the maximum number of hosts per subnet?
3. What is the default mask for the given network?
4. What is the subnet mask you would use for your design?
5. List all the subnet IDs along with broadcast address and the valid IP range.
6. Can we add more subnets in the future to the existing network without changing the network design? If so, what are your observations?

Question 3:

You are given a class A network block of 10.10.0.0.

1. How many subnet bits are required to create 50 subnets?
2. What is the maximum number of hosts per subnet?
3. What is the default mask for the given network?
4. What is the subnet mask you would use for your design?
5. List all the subnet IDs along with broadcast address and the valid IP range.
6. Can we add more subnets in the future to the existing network without changing the network design? If so, what are your observations?