

# TCP/IP PRACTICE QUESTIONS

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Directions: Based on the given information fill in all appropriate blanks.

1: Given an IP address of 155.47.199.3 and knowing the client needs 21 subnets.

- A: The default subnet mask is\_\_\_\_\_.
- B: The network address is\_\_\_\_\_.
- C: The required subnet mask is \_\_\_\_\_.
- D: The maximum number of subnets that are available with this subnet mask is\_\_\_\_\_.
- E: List all available subnets.
- F: The subnet that this IP address falls on is\_\_\_\_\_.
- G: The host address is\_\_\_\_\_.
- H: The range of host IP addresses that occur on this subnet is\_\_\_\_\_.
- I: The maximum number of hosts that can occur on this subnet is \_\_\_\_\_.
- J: The class of this IP address is\_\_\_\_\_.

2: Given an IP address of 205.147.99.53 and knowing the client needs 15 subnets.

- A: The default subnet mask is\_\_\_\_\_.
- B: The network address is\_\_\_\_\_.
- C: The required subnet mask is \_\_\_\_\_.
- D: The maximum number of subnets that are available with this subnet mask is\_\_\_\_\_.
- E: List all available subnets.
- F: The subnet that this IP address falls on is\_\_\_\_\_.
- G: The host address is\_\_\_\_\_.
- H: The range of host IP addresses that occur on this subnet is\_\_\_\_\_.
- I: The maximum number of hosts that can occur on this subnet is \_\_\_\_\_.
- J: The class of this IP address is\_\_\_\_\_.

3: Given an IP address of 55.247.9.213 and knowing the client needs 123 subnets.

- A: The default subnet mask is\_\_\_\_\_.
- B: The network address is\_\_\_\_\_.
- C: The required subnet mask is \_\_\_\_\_.
- D: The maximum number of subnets that are available with this subnet mask is\_\_\_\_\_.
- E: List all available subnets.
- F: The subnet that this IP address falls on is\_\_\_\_\_.
- G: The host address is\_\_\_\_\_.
- H: The range of host IP addresses that occur on this subnet is\_\_\_\_\_.
- I: The maximum number of hosts that can occur on this subnet is \_\_\_\_\_.
- J: The class of this IP address is\_\_\_\_\_.

4: Given an IP address of 25.47.199.3 and knowing the client needs 1000 hosts on a subnet.

- A: The default subnet mask is\_\_\_\_\_.
- B: The network address is\_\_\_\_\_.
- C: The required subnet mask is \_\_\_\_\_.
- D: The maximum number of subnets that are available with this subnet mask is\_\_\_\_\_.
- E: List all available subnets.
- F: The subnet that this IP address falls on is\_\_\_\_\_.
- G: The host address is\_\_\_\_\_.
- H: The range of host IP addresses that occur on this subnet is\_\_\_\_\_.
- I: The maximum number of hosts that can occur on this subnet is \_\_\_\_\_.
- J: The class of this IP address is\_\_\_\_\_.

5: Given an IP address of 125.47.9.73 and knowing the client needs 18 subnets with 25 hosts on each subnet. Is this possible?

- A: The default subnet mask is\_\_\_\_\_.
- B: The network address is\_\_\_\_\_.
- C: The required subnet mask is \_\_\_\_\_.
- D: The maximum number of subnets that are available with this subnet mask is\_\_\_\_\_.
- E: List all available subnets.
- F: The subnet that this IP address falls on is\_\_\_\_\_.
- G: The host address is\_\_\_\_\_.
- H: The range of host IP addresses that occur on this subnet is\_\_\_\_\_.
- I: The maximum number of hosts that can occur on this subnet is \_\_\_\_\_.
- J: The class of this IP address is\_\_\_\_\_.

6: Given two hosts on a network with IP addresses of 125.47.9.73 and 125.49.9.74. Are these two on the same subnet? You are using a subnet mask of 255.240.0.0. Prove your position by answering the following for each address.

125.47.9.73

- A: The default subnet mask is\_\_\_\_\_.
- B: The network address is\_\_\_\_\_.
- C: The required subnet mask is \_\_\_\_\_.
- D: The maximum number of subnets that are available with this subnet mask is\_\_\_\_\_.
- E: List all available subnets.
- F: The subnet that this IP address falls on is\_\_\_\_\_.
- G: The host address is\_\_\_\_\_.
- H: The range of host IP addresses that occur on this subnet is\_\_\_\_\_.
- I: The maximum number of hosts that can occur on this subnet is \_\_\_\_\_.
- J: The class of this IP address is\_\_\_\_\_.

125.49.9.74

- A: The default subnet mask is\_\_\_\_\_.
- B: The network address is\_\_\_\_\_.
- C: The required subnet mask is \_\_\_\_\_.
- D: The maximum number of subnets that are available with this subnet mask is\_\_\_\_\_.
- E: List all available subnets.
- F: The subnet that this IP address falls on is\_\_\_\_\_.
- G: The host address is\_\_\_\_\_.
- H: The range of host IP addresses that occur on this subnet is\_\_\_\_\_.
- I: The maximum number of hosts that can occur on this subnet is \_\_\_\_\_.
- J: The class of this IP address is\_\_\_\_\_.