

# First-Year Companion Guide 2<sup>nd</sup> Edition

## Chapter 10 (24)

### Check Your Understanding

1. If a router receives a packet with destination address 192.16.1.2, assuming a subnet mask of 255.255.255.0, what is the subnet address for the actual subnet where that host is located? That is, what would a router look for in its routing table to forward a packet to host 192.16.1.2?
  - A. 192.16.1.0
  - B. 192.31.4.0
  - C. 192.31.16.0
  - D. 192.31.12.0
2. If a router has a serial interface S0, with IP address 172.16.1.2 and using a subnet mask of 255.255.255.0, what is the subnet address? (What will be put in the routing table for S0?)
  - A. 172.31.4.0
  - B. 172.31.16.0
  - C. 172.31.12.0
  - D. 172.16.1.0
3. If you want to associate a name with an IP address, such as asu 129.219.2.1, what command structure would you use?
  - A. ip host asu 129.219.2.1
  - B. ip name asu 129.219.2.1
  - C. ip host name asu 129.219.2.1
  - D. ip host address asu 129.219.2.1
4. Which of the commands enable you to verify address configuration in your internetwork?
  - A. ping
  - B. telnet
  - C. trace
  - D. All of the above
5. What is the purpose of tcp-port-number in the ip host commands?
  - A. It identifies which IP address to use when using the hostname with an EXEC connect or Telnet command.
  - B. It sets the default port of any device to port 23.
  - C. It sets the port of the source device in the router table.
  - D. It identifies which TCP port to use when using the hostname with an EXEC connect or Telnet command.
6. If you typed show host at the router prompt, what would an entry of temp in the resulting table mean?
  - A. It shows that the entry has expired.
  - B. It identifies the entries that were manually configured in a static host table.
  - C. It lets the user know that the entry was acquired from DNS use.
  - D. It alerts the administrator that the entry is not current.
7. Which is true of an IP address for a device or interface?
  - A. It has a network number and then all 0s.
  - B. It has a network number and then all 1s.
  - C. It has a nonzero network number with 0 in the host field.
  - D. It has a nonzero host number.
8. Which of the following best describes the function of a broadcast address?
  - A. It sends a message to a single network destination.
  - B. It copies messages and sends them to a specific subset of network addresses.
  - C. It sends a message to all nodes on a network.
  - D. It sends a message to every node to which the router has access.
9. What is the purpose of using the trace command?

- A. It is the most complete test mechanism available.
  - B. It is a very basic testing mechanism.
  - C. It adds the IP address and the DNS to the router table.
  - D. It locates failures in the path from the source to the destination.
10. What is the purpose of the ip name-server command?
- A. It defines which hosts can provide the name service.
  - B. It defines a naming scheme that allows a device to be identified by its location.
  - C. It identifies which TCP port to use when using the hostname.
  - D. It generates messages from each router used along a datagram's path.
11. If you want to map a domain name to an IP address, what is the first thing you must do?
- A. Identify the hostnames
  - B. Specify a name server
  - C. Enable the DNS
  - D. Refer to the DNS for the IP address of that device
12. What is the purpose of the no ip domain-lookup command?
- A. It defines which hosts can provide the name service.
  - B. It defines a naming scheme that allows a device to be identified by its location.
  - C. It turns on name-to-address translation in the router.
  - D. It turns off name-to-address translation in the router.
13. Which of the following best describes the function of the show hosts command?
- A. It identifies the subnet mask being used at the destination site.
  - B. It maintains a cache of host name-to-IP address mappings for use by EXEC commands.
  - C. It is used to display a cached list of hostnames and addresses.
  - D. It shows the host name for the IP address.
14. What is the function of the telnet command?
- A. It verifies the application layer software between source and destination stations.
  - B. It verifies the hardware connection and the logical address of the network layer.
  - C. It generates messages from each router used along the path.
  - D. It shows how many hours have passed since the software referred to the entry.
15. What is the function of the ping command?
- A. It verifies the application layer software between source and destination stations.
  - B. It uses ICMP to verify the hardware connection and the logical address of the network layer.
  - C. It assigns values to generate messages from each router used along the path.
  - D. It gives descriptions of how information was sent and its current status.
16. Which command would you use to set up static name-to-address entries in the router's configuration file?
- A. ip perm
  - B. ip route
  - C. ip name
  - D. ip host
17. Which of the following best describes the function of the extended command mode of the ping command?
- A. It is used to specify the supported Internet header options.
  - B. It is used to specify the time frame for the ping return.
  - C. It is used to diagnose why a ping was delayed or not returned.
  - D. It is used to trace the datagram as it passes through each router.

18. What does it mean when you use the ping command and get a result of !?  
A. Successful receipt of an echo reply  
B. A timeout waiting for an echo reply  
C. A destination unreachable message received  
D. A congestion-experienced message received
19. How do you enter the extended mode of the ping command?  
A. ping x  
B. ping e  
C. ping [return key]  
D. eping
20. What does the response \* mean when it comes in response to the trace command?  
A. The destination device refused the trace.  
B. The system timed out waiting for the trace reply.  
C. The network refused the trace.  
D. The source used a trace that was not supported by the network protocol.

#### Answers

1. A   2. D   3. A   4. D   5. D   6. C   7. D   8. C   9. D   10. A   11. C  
12. D   13. C   14. A   15. B   16. D   17. A   18. A   19. C   20. B