

1. a.

2. a.

3. b.

4. a.

5. a.

6. b.

7. a.

8. a.

9. b.

10. a.

11. b.

12. b.

13. b.

14. e.

15. b.

16. d.

17. a.

18. e.

- 19. a.
- 20. a.
- 21. b.
- 22. c.
- 23. a. wireless, fiber optic
- 24. a. local area networks
b. LANs
- 25. a. wide area networks
b. WANs
- 26. a. client server
b. client-server
c. client/server

27. The proliferation of technology has resulted in lower costs and more choices. As a result, managers can lower costs by decentralizing procurement and reducing centralized computing support. However, this decentralization can increase management and support costs.

28. Local area networks are typically limited to a single premise where all interconnections are implemented by and owned by the business. In contrast, wide area networks typically involve multiple premises and the interconnections must rely on access to public right-of-ways and services provided by regulated common carriers.

29. In a circuit-switching network, a dedicated communication path is established between two stations through the nodes of the network. That path is a connected sequence of physical links between nodes. On each link, a logical channel is dedicated to the connection. Data generated by the source station are transmitted along the dedicated path as rapidly as possible. At each node, incoming data are routed or switched to the appropriate outgoing channel without delay. The most common example of circuit switching is the telephone network.

In a packet-switching network, data are sent out in a sequence of small chunks, called packets. Each packet is passed through the network from node to node along some path leading from source to destination. At each node, the entire packet is received, stored briefly, and then transmitted to the next node. Packet-switching networks are commonly

used for terminal-to-computer and computer-to-computer communications.