

Wide Area Networking Technologies Review

1. Our company wants a backup Wide Area Network (WAN) connection that is not buried in the Earth, so we choose to mount a satellite dish on the roof of the building to communicate with what type of satellite?
2. Approximately how far above the Earth does a Geosynchronous Orbiting Satellite orbit?
3. Francisco is mounting a satellite dish on the property at a business located in the Europe. What direction (north, east, south or west) will he orient the dish to pick up the GEO satellite signal?
4. What two pieces of information are required to point a satellite dish to a GEO satellite?
5. The IRIDIUM satellite constellation is located approximately _____ miles above the Earth.
6. LEO satellites such as the IRIDIUM constellation have _____ satellites.
7. What are the advantages of the LEO satellite over the GEO satellite WAN?
8. At what latitude will a satellite dish become less reliable based upon atmospheric conditions or ground obstructions?
9. Marcy is planning a Wide Area Networking (WAN) connection between two banks in the city using a line of site technology mounted on towers on the top of their buildings. What line of sight WAN technology will she use?
10. What are the optical carrier speeds for the following cables?
 - a. OC-24
 - b. OC-48
 - c. OC-192
 - d. OC-768
11. What WAN technology will send a computer digital signal over telephone lines?
12. What WAN technology will send a computer digital using analog signals over telephone lines?
13. What are the maximum bandwidths we can get with DSL?
14. Veronica is installing a DSL WAN connection at a small design office. Where there is a conventional phone connection, Veronica adds a _____ to allow the voice communication and digital computer network to use the same line.

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15. Francine is deciding what WAN technology she will put in the office. What are typical speeds for high speed Internet using coax cable?
16. Place the WAN technologies in order of typical download speed from fastest (top) to slowest (bottom).
 - a. Satellite
 - b. Fiber optic
 - c. Coax cable
 - d. DSL
 - e. Telephone modem
 - f. Microwave
17. Mark is installing coax cable in a house for telephone, computer and television. Besides the thinnest coax cable and wall connection plates with the coax connectors, what other devices can we see in the installation?
18. When installing a WAN connection from the ISP at a business, what do we need to know about the service to setup the office router?
19. When installing a WAN connection with a static IP address from the ISP, what we receive from their support technician?
20. What are two free DNS addresses provided by Google?