

# Network range and speed

**Complete the conversation. Select the missing word.**

92

300

150

46

3

512

56

Karoline: How do you describe network speed?

Sam: In bits, kilobits, megabits and gigabits. They describe network speed. For example, dial-up connections allow (1) \_\_\_\_\_ kilobits per second and DSL from (2) \_\_\_\_\_ kilobits per second to (3) \_\_\_\_\_ megabits per second.

Karoline: OK. I've got that. What about the range?

Sam: Range is the distance of network coverage, so distance units represent network range. Most countries use metric but some use feet as units of measurement. Metres or feet usually describe the range of a network. Home networking routers support a range up to (4) \_\_\_\_\_ feet or (5) \_\_\_\_\_ metres indoors and (6) \_\_\_\_\_ feet or (7) \_\_\_\_\_ metres outdoors.

Karoline: Thanks.

**Read the paragraph and answer the questions.**

## Range

Wireless networks have limited range. Network range depends on the type of 802.11 protocol, strength of the device transmitter and the architecture of the surrounding area. Some structures, such as walls and metal frames, reduce the range of a WLAN by 25%. However, users can extend the range of a WLAN. Repeaters forward the wireless signal to access points or routers and increase the range of a network.

## Speed

Bandwidth and latency are the measures of computer network speed, or data transfer rate. Bandwidth is the maximum throughput of data in bits per second.

Some modems support 100 Gbit/s but speed depends on the hardware and software used. Latency is the delay that network creates during the transfer data. Users have no, or very little, control over bandwidth and latency.

- 1 How many things does network range depend on?
- 2 What can reduce network range?
- 3 What can improve network range?
- 4 What two things affect speed?