1. Match the four different networks shown on the left column to the corresponding range on the right column.

|  |  |  |
| --- | --- | --- |
| WLAN |  | >50 km |
|  |  |  |
| WWAN |  | Up to 50 km |
|  |  |  |
| WPAN |  | 10 m |
|  |  |  |
| WMAN |  | 100 m |

1. Modify the following texts so that the statement is true.

UWB technology capable of doing everything that Bluetooth can, but it handle a lot more data at higher speeds.

The IEEE 802.16 standard is more commonly known as .

ZigBee is a technology used in characterized by being power consumption, installation, data rates and frequency bands.

1. Sort the following security methods from the best (1) to worst (5).

\_\_5\_\_ WEP

\_\_3\_\_ WAP+TKIP/AES

\_\_2\_\_ WPA+AES

\_\_4\_\_ WPA+TKIP

\_\_1\_\_ WPA2+AES

1. Name at least five potential applications for wireless networks:

1. M2M communication

2. Surveillance cameras

3. Communication between wireless devices

4. Emergency applications

5. Industrial process and control applications

1. Complete the following table:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Bluetooth | IrDA | Wi-Fi |
| Type of wave | radio | infrared | radio |
| Typical range | 10 m | 1 m | 100 m |
| Line of sight required? | No | Yes | No |
| Maximum data rate | 720 Kbps | 16 Mbps | 54 Mbps |
| Frequency bands | 2.4 GHz | Infrared band | 2.4 GHz |

1. Match the terms shown on the left column to the corresponding definitions on the right column.

|  |  |  |
| --- | --- | --- |
| BSS Identifier |  | Network in which devices communicate with each other point to point and no access point is required |
|  |  |  |
| Ad hoc network |  | Access point together all associated stations |
|  |  |  |
| Infrastructure network |  | Alphanumeric key identifying the WLAN |
|  |  |  |
| Station |  | Whatever device having the capability to interfere the wireless medium |
|  |  |  |
| Basic service set |  | Enables the interconnection of wireless networks to the wired network. |
|  |  |  |
| Distribution system |  | Network in which devices communicate with each other through an access point. |