1. Modify the following texts so that the statements are true:

LTE stands for and is a registered trademark owned by .

The LTE interface is with older 2G and 3G networks.

The goal of LTE was to the capacity and speed of data networks.

The LTE network consists of the core network named and the access network known as

The channels are the real implementation of the transport channel.

The channels correspond to data-transfer services.

The channels describe how and with what characteristics data are transferred.

application(s) may be running in a UE at the same time.

1. Assign the individual technologies to the corresponding generations of mobile systems:

UMTS, LTE, CDMA2000, WiMAX, GPRS, NMT, EDGE, HSPA+, GSM, LTE-A

|  |  |
| --- | --- |
| 1st generation | NMT |
| 2nd generation | GSM, GPRS, EDGE |
| 3rd generation | UMTS, CDMA2000 |
| 4th generation | HSPA+ |
| 5th generation | WiMAX, LTE, LTE-A |

1. Assign the terms from the left column to the corresponding properties on the right (one or more).

User profile storage

HLR

AuC

User identification

Authentication

Integrity protection

User addressing

Service subscription

Radio path ciphering

1. Mark the true statements.

x **2G GSM cellular networks were initially designed only for circuit-switched services.**

**x The packet switching domain is composed of the MSC/VLR and Gateway MSC.**

□ LTE is based on PS services so voice communication is natively supported.

x **Voice communication is in LTE supported only by using IMS services.**

□ Voice communication in LTE cannot be possible.

□ LTE is based on CS services so voice communication is natively supported.

x **LTE Advanced adds downlink and uplink multiple antenna transmission to the LTE**