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

UMTS, NMT, GSM, LTE, LTE-A, CDMA, GPRS, HSPA, EDGE, HSPA+, GSM.

|  |  |
| --- | --- |
| 1st generation |  |
| 2nd generation |  |
| 3rd generation |  |
| 4th generation |  |

1. Sort the types of cells in mobile networks from the smallest (1) to the largest (5).

\_\_\_ microcell

\_\_\_ femtocell

\_\_\_ macrocell

\_\_\_ satellite cell

\_\_\_ picocell

1. Propose and draw a frequency plan (you have 3 frequencies available).

kmitoctovy plan_slepa mapa.eps  – frequency f1

 – frequency f2

 – frequency f3

1. Correct the text so that the following statement is true.

The number of base stations in a network is **\_\_** times than in a network .

1. List three basic parameters that characterize the access methods used in mobile networks.
2. \_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_
4. \_\_\_\_\_\_\_\_\_\_
5. Assign the reasons to the corresponding term used for automatic handover.

Internal handover

reason: subscriber mobility

referred to as "hard handover"

referred to as "soft handover"

External handover

reason: cell optimization

1. Identify what physical principle appears during multipath propagation of waves in the individual cases below.

**odrazy_lom_rozptyl.eps**

\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_

obstacle

obstacle

obstacle

mobile

station

mobile

station

mobile

station