WORKSHEET C4/1

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	

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

___ microcell

___ femtocell

___ macrocell

___ satellite cell

___ picocell

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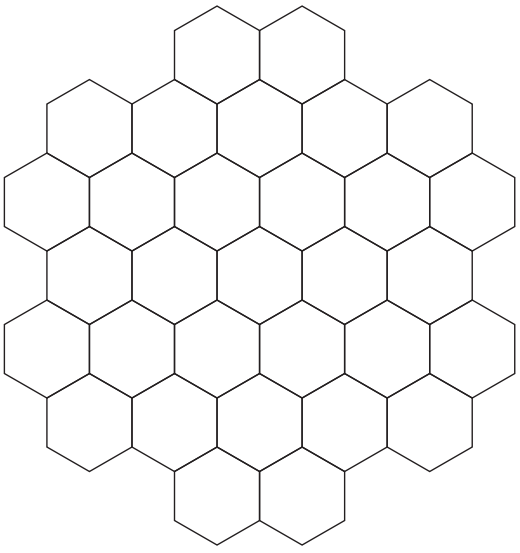
3. Propose and draw a frequency plan (you have 3 frequencies available).



① – frequency f_1

② – frequency f_2

③ – frequency f_3

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

The number of base stations in a network (with sectorization / without sectorization) is **3** times (higher / lower) than in a network (with sectorization / without sectorization).

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5. List three basic parameters that characterize the access methods used in mobile networks.

1. _____
2. _____
3. _____

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6. Assign the reasons to the corresponding term used for automatic handover.

Internal handover	reason: subscriber mobility	referred to as "hard handover"
External handover	reason: cell optimization	referred to as "soft handover"

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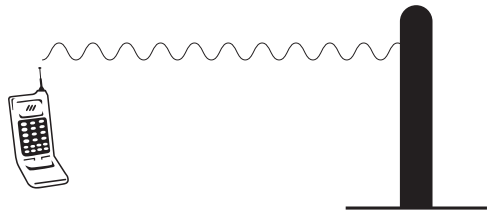
7. Identify what physical principle appears during multipath propagation of waves in the individual cases below.



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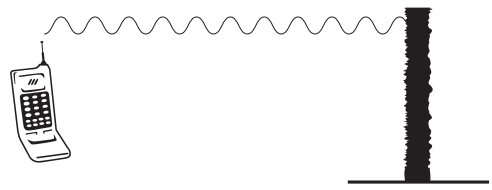

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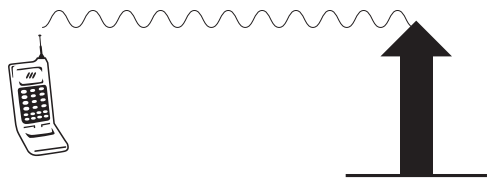

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