2.4 Geometric theory of diffraction

Quiz

Answer these questions to get feedback on how well you understand the course. Only one of the answers is correct. You don't have to answer every question. If you don't know the answer you can just leave it blank (default option: "I won't answer this question") and this won't affect your score. Answering **correctly** will **add 2 points** to your score but on the other hand you'll **lose 1 point** if your answer is **wrong**. The questions are divided in groups of five questions.

Press **See result** after you have finished answering.

Displaying questions **1**..**5** of **5**:

Question 1

GTD …

Possible answers for question 1:

- ⚪ … explains the diffraction phenomena using a simple Euclidian geometry.
- ⚪ … is an original interpretation of Huygens' principle.
- ⚪ … enables to apply the principles of geometrical optics to wave propagation modeling in an inhomogeneous environment.
- ⦿ I won't answer this question

Question 2

In GTD, diffraction waves are assumed to be …

Possible answers for question 2:

- ⚪ … radiated by the currents on the obstacle to eliminate field discontinuities at boundaries.
- ⚪ … negligible – otherwise the wave theory of diffraction has to be applied.
- ⚪ … dominant – other waves can be therefore neglected.
- ⦿ I won't answer this question

Question 3

Diffraction factor is dominantly determined …

Possible answers for question 3:

- ⚪ … by the contrast between the permittivity of the obstacle and surrounding.
- ⚪ … by the local properties of the obstacle.
- ⚪ … by the angle of incidence.
- ⦿ I won't answer this question

Question 4

In the practical life, GTD …

Possible answers for question 4:

- ⚪ … enables to model the wave diffraction on hills, e.g..
- ⚪ … is not applicable.
- ⚪ … can be used at very low frequencies only.
- ⦿ I won't answer this question

Question 5

Diffraction waves are excited …

Possible answers for question 5:

- ○ … by all the incident beams.
- ○ … by beams in a sufficient distance form edges.
- ○ … by beams contacting the obstacle surface at edges.
- ● I won't answer this question

see result