

2.3 Geometrical optics

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

Geometrical optics is a method for wave propagation modeling that ...

Possible answers for question 1:

- ... is applicable at optical frequencies only
- ... can be used both at optical frequencies and at radio frequencies.
- ... works properly at any frequency without limitations
- I won't answer this question

Question 2

Geometrical optics enables to compute ...

Possible answers for question 2:

- ... an angle of incidence and an angle of reflection of a beam only.
- ... wave propagation in case the phase of the wave does not need to be considered.
- ... wave trajectories, intensity variations, and polarization properties.
- I won't answer this question

Question 3

The basic equation of geometrical optics tells us that ...

Possible answers for question 3:

- ... the squared refractivity index equals to the squared gradient of the eiconale.
- ... the refractivity index equals to the square root of permittivity and permeability product.
- ... the angle of incidence equals to the angle of reflection.
- I won't answer this question

Question 4

The beam tube was introduced in order to ...

Possible answers for question 4:

- ... compute intensity variations of the propagating wave.
- ... define the finite space where the beam energy is concentrated.
- ... model polarization properties of propagating waves.
- I won't answer this question

Question 5

Computations of intensity variations in geometrical optics are conditioned by ...

Possible answers for question 5:

- ... wave propagation in a homogeneous medium.
- ... the knowledge of wave trajectories.
- ... the knowledge of phase distribution.
- I won't answer this question

see result