

## 7.2 Passage of Gaussian beam through optic elements

### 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

The beam matrix of an optical element ...

Possible answers for question 1:

- ... associates the equiphase surface radius and the beam width at the input to the waveform radius and the beam width at the output.
- ... associates the input position and the input propagation angle to the output position and the output propagation angle.
- ... enables to compute the output power from the input one.
- I won't answer this question

#### Question 2

The beam matrix of the planar mirror ...

Possible answers for question 2:

- ... is non-diagonal.
- ... is complex.
- ... is unitary.
- I won't answer this question

#### Question 3

The beam matrix of the free space ...

Possible answers for question 3:

- ... contains units in the diagonal and the distance above the diagonal.
- ... is unitary.
- ... is not diagonal.
- I won't answer this question

#### Question 4

In case the optical system consists of several elements, the resultant beam matrix ...

Possible answers for question 4:

- ... is a product of beam matrices of elements.
- ... is a sum of beam matrices of elements.
- ... cannot be simply expressed.
- I won't answer this question

#### Question 5

The focal distance of the convex lens ...

Possible answers for question 5:

- ... can be both positive and negative.
- ... is negative.
- ... is positive.
- I won't answer this question

see result