

## 2.2 General 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

In case a dielectric cylinder is illuminated by a primary electromagnetic wave ...

Possible answers for question 1:

- ... conductive currents are induced on the surface of the cylinder, and a secondary wave is radiated.
- ... the dielectrics is polarized and a secondary wave is radiated.
- ... the cylinder absorbs the primary wave.
- I won't answer this question

#### Question 2

The secondary wave that is radiated by currents induced on a perfectly electrically conductive cylinder is described by ...

Possible answers for question 2:

- ... a homogeneous wave equation in Cartesian coordinates.
- ... the first Maxwell equation.
- ... a homogeneous wave equation expressed in terms of Hankel functions.
- I won't answer this question

#### Question 3

In the surrounding of the cylinder ...

Possible answers for question 3:

- ... both the traveling waves and the standing ones appear.
- ... only traveling waves appear.
- ... only standing waves appear.
- I won't answer this question

#### Question 4

In the analysis, boundary conditions ...

Possible answers for question 4:

- ... are considered in order to determine integration constants in the general solution.
- ... are not considered.
- ... are considered in order to determine the amplitude of the primary wave.
- I won't answer this question

#### Question 5

When evaluating integration constants in the analytical solution ...

Possible answers for question 5:

- ... the method of variables separation is applied.
- ... the method of inexplicit coefficients is used.
- ... the method per partes is applied.
- I won't answer this question

see result