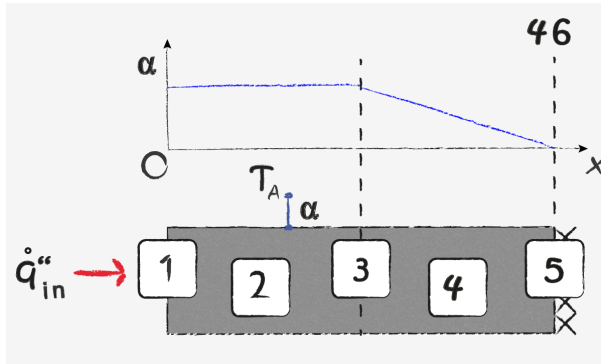# Heat Conduction: Task 46

The image describes a rectangular body with constant heat conduction coefficient from the left to the middle part and then decreasing linearly to the right. The wall on the right side is adiabatic and the heat flows in from the left side.

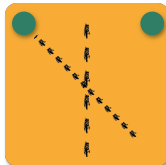**1**

Heat flows from left to right which means that the temperature gradient decreases from left to right.

2

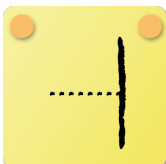Due to heat loss through convection, the temperature gradient decreases from left to right.

3

The temperature gradient doesn't change at the interface because there is no material or α change.

4

On the adiabatic wall the temperature gradient is zero and due to heat loss through convection, the temperature gradient decreases from left to right.

5

On the adiabatic wall the temperature gradient is zero.