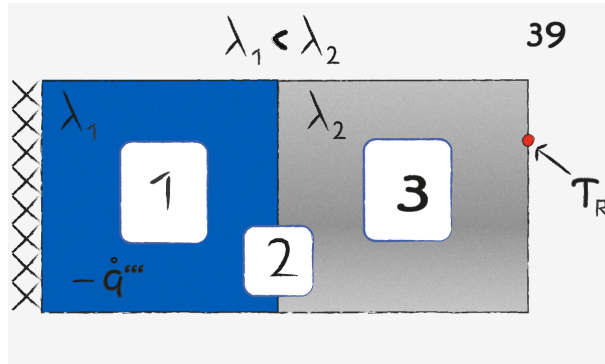


Heat Conduction: Task 39



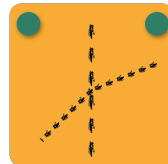
The image describes a rectangular body with two different heat conductivities, homogeneous heat loss in the blue area. The wall on the left side is adiabatic and the temperature on the right side is maximum.

1



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

2



λ_1 is smaller than λ_2 which means the Temperature gradient in 1 is steeper than in 2.

3



According to Fourier's law. At constant area and heat conductivity the temperature gradient decreases linearly from right to left.