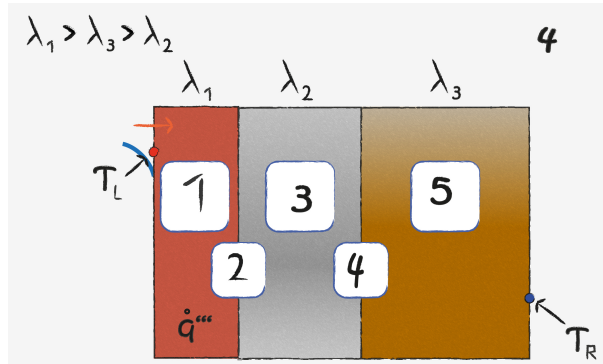




Heat Conduction: Task 4



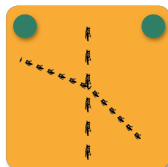
The image describes a rectangular body with a heat source on the left side. The highest temperature is on the left.

1



Due to the constantly increasing heatflux (heat source), the temperature gradient increases constantly from left to right.

2



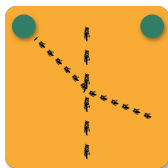
λ_2 is smaller than λ_1 which means the Temperature gradient in 2 is steeper than in 1

3



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

4



λ_2 is smaller than λ_3 which means the Temperature gradient in 2 is steeper than in 3

5



according to Fourier's law. At constant heat conductivity and area, the Temperature gradient decreases linearly