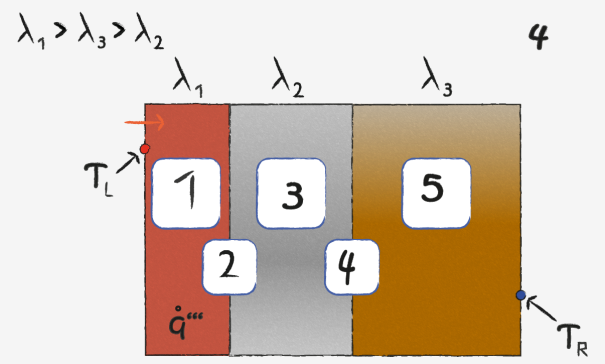
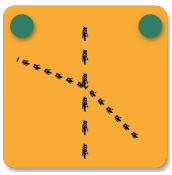
Heat Conduction: Task 4



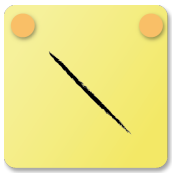
The image describes a rectangular body with a heat source on the left side. The highest temperature is on the left.

1 

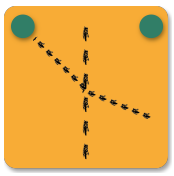
Due to the constantly increasing heatflux (heat source), the temperature gradient increases constantly from left to right.

2 

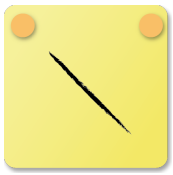
λ_2 is smaller than λ_1 which means the Temperature gradient in 2 is steeper than in 1

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 

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