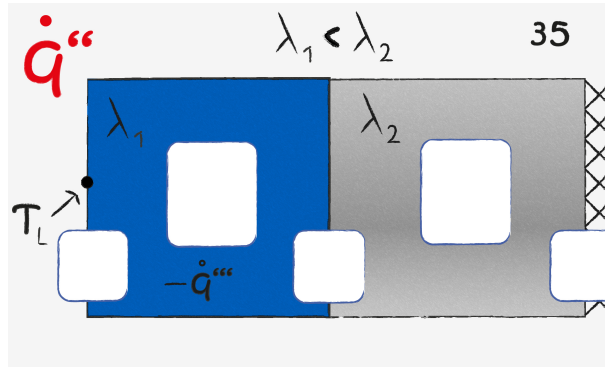


Axial Heat Flux: Task 35



The image describes a rectangular body with a volumetric heat sink in section 1 and an adiabatic wall on the right side. Thermal conductivity of section 2 is greater as of section 1.

1



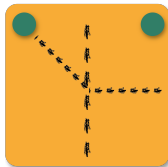
The heat sink in section 1 indicates heat flow towards the right, which yields a positive heat flux.

2



The heat sink causes the specific heat flux to decrease linearly.

3



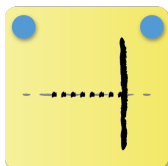
The transition is characterized by a kink from decrease to constant, since it marks the end of the heat sink.

4



The heat flux vanishes, because there is no heat exchange towards the right.

5



The adiabatic wall forces the heat flux to be zero at the boundary.