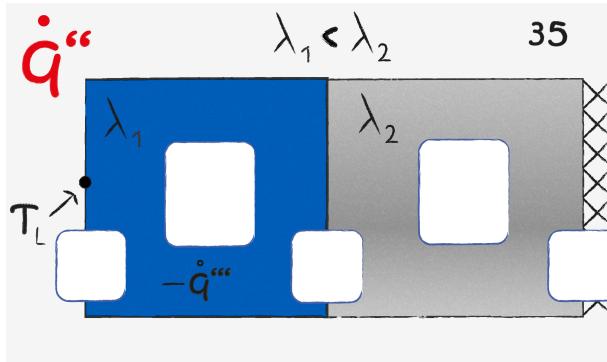


Axial Heat Flux: Task 35



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 than 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.