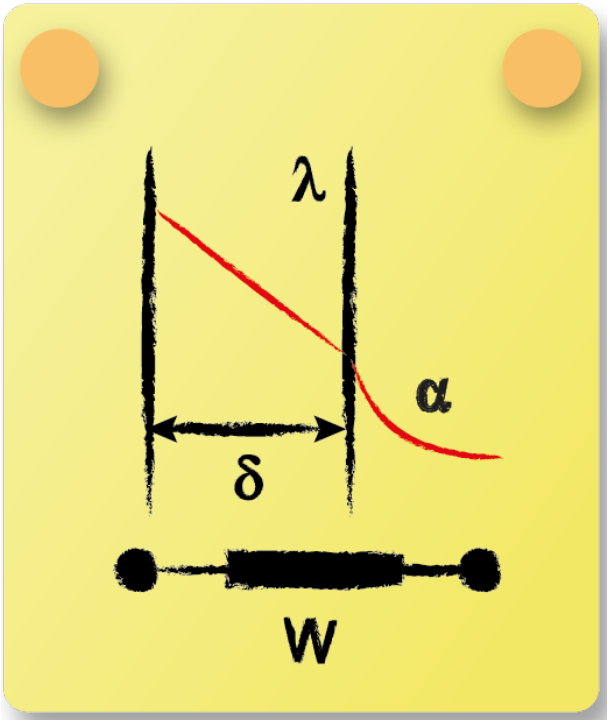
Heat Transfer Resistance: Task 4



A wall is given with thickness δ and cross section area A. Convective heat transfer at the right is specified by the heat transfer coefficient α.

The overall heat transfer resistance in series is calculated as the sum of each contribution:

$$W = \sum_i W_\mathrm{i}$$

Which yields:

$$W = \frac{\delta}{\lambda A} + \frac{1}{\alpha A}$$