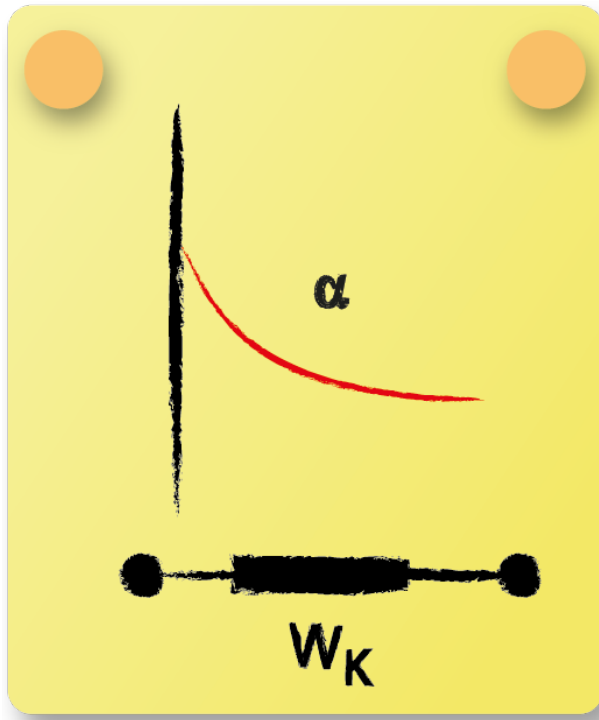# Heat Transfer Resistance: Task 3

A flat plate is given with heat transfer coefficient α and surface A.

Heat transfer resistance is defined as:

$$W = \frac{\Delta T}{\dot{Q}}$$

With convective heat flux:

$$\dot{Q} = \alpha \Delta T A$$

One obtains:

$$W = \frac{1}{\alpha A}$$