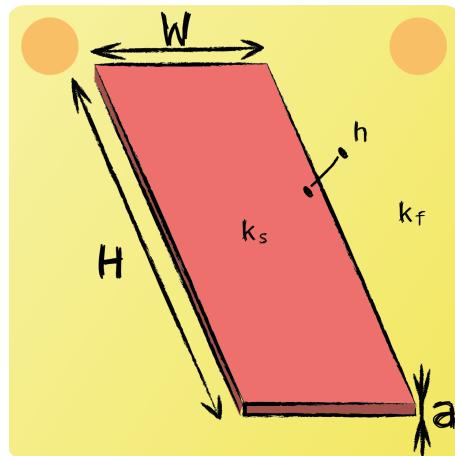


Lecture 06 - Biot Number 01

Give an expression for the Biot number Bi, for a flat plate subjected to convection.



The characteristic length of a vertical plate.

$$L_c = \frac{V}{A_s} = \frac{WHa}{2WH} = \frac{a}{2}$$

Biot number:

$$\text{Bi} = \frac{hL_c}{k_s} = \frac{ha}{2k_s}$$