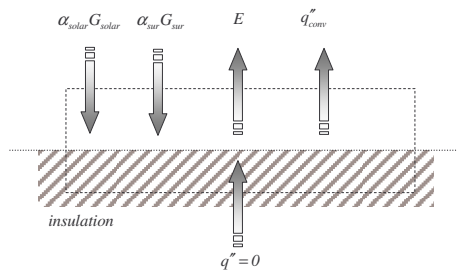
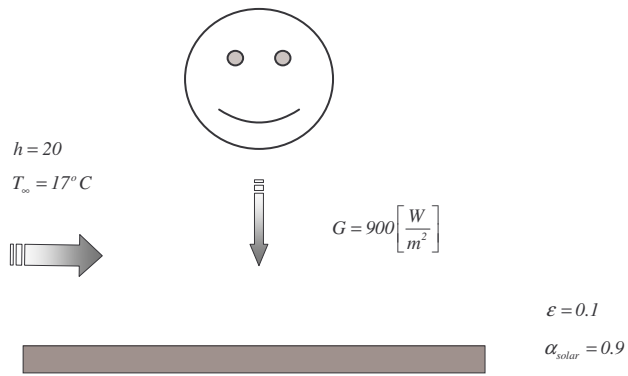


12.109



$$\alpha_{solar} G_{solar} + \alpha_{sur} G_{sur} = \varepsilon E_b + h(T_s - T_{\infty})$$

$$\alpha_{solar} G_{solar} + \varepsilon \sigma T_{sur}^4 = \varepsilon \sigma T_s^4 + h(T_s - T_{\infty})$$

$\Downarrow$ solve numerically

$$T_s = 329K = 56^{\circ}C$$