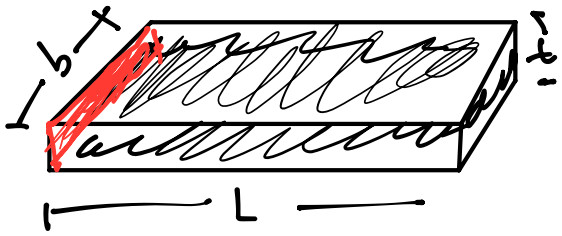
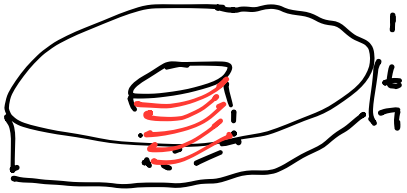
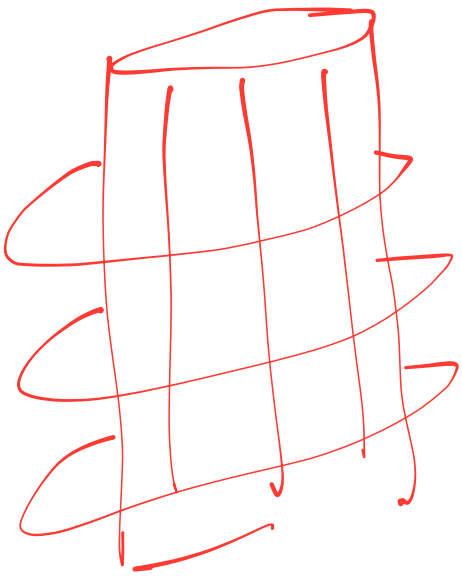




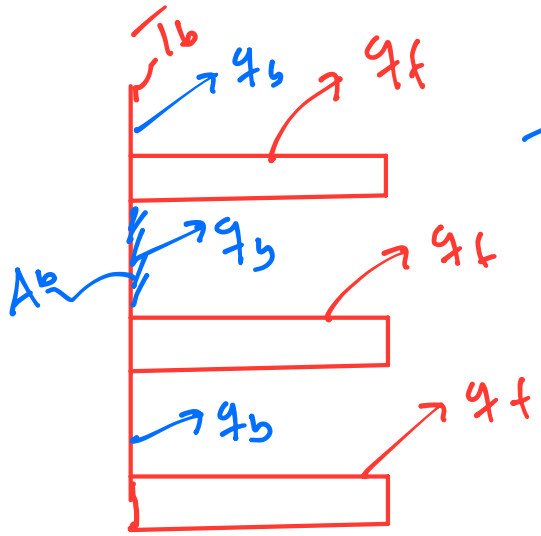
$\theta = T - T_{amb}$



$\theta_b = T_b - T_f$

$q_{TOT} = 3q_f + 3q_b$

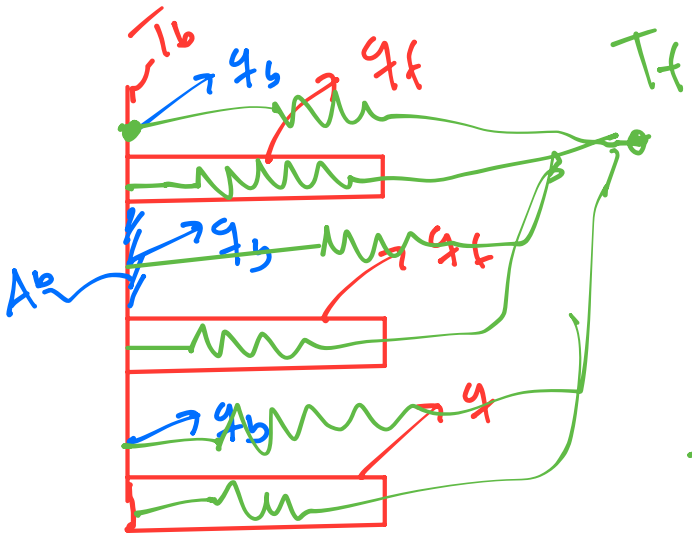
$= 3q_f + 3hA_b\theta_b$



$q_f = \eta_f A_f \theta_b$

$$\eta_f = \frac{q_f}{hA_s\theta_b}$$

$$q_f = \frac{\theta_b}{\frac{1}{hA_s\eta_f}} \rightarrow R_f$$



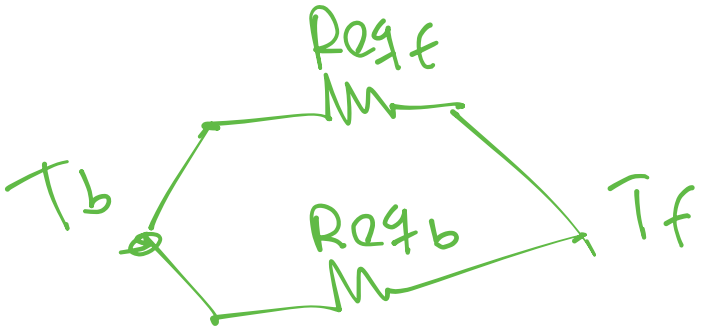
$$\frac{1}{R_{eq_f}} = 3\,hA_s\eta_f$$

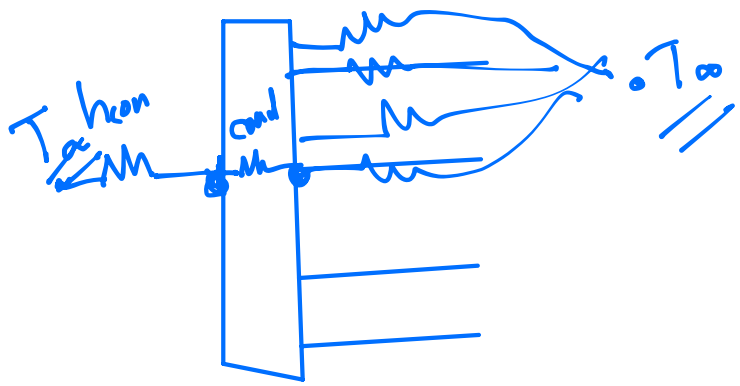
$$R_{eq_f} = \frac{1}{3hA_s\eta_f}$$

$$\frac{1}{R_{eq}} = \sum \frac{1}{R_i}$$

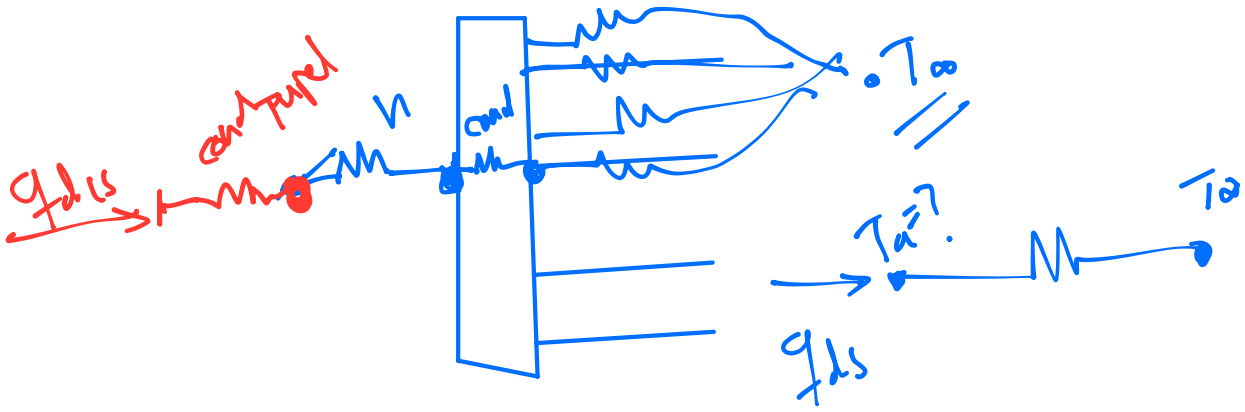
$$\frac{1}{R_{eq_b}} = 3\,hA_b$$

$$R_{eq_b} = \frac{1}{3hA_b}$$





$$q = \frac{T_w - T_\infty}{R_{eq}}$$


q_{ds}
convection
R
cond
T_∞
$T_s = ?$
T_0
q_{ds}