



$$2) \quad q_{\text{loss}} = \frac{T_i - T_o}{\sum_{i=1}^n R_i} \rightarrow q_{\text{loss}} = \frac{\Delta T}{\frac{1}{h_i \cdot 1} + \frac{L}{K \cdot 1}}$$

$$\boxed{T_i - T_1 = q \left(\frac{1}{h_i} + \frac{L}{K} \right)}$$

$$\boxed{T_1 = T_i - q \left(\frac{1}{h_i} + \frac{L}{K} \right)}$$

3)

$$R_i = \frac{1}{h_i \cdot A_s} = \frac{1}{h_i \cdot 1} = h_i^{-1}$$

$$R_2 = \frac{L}{K \cdot A} = \frac{L}{K \cdot \frac{1}{2}} = 2L/K$$

$$\boxed{\begin{matrix} R_i = h_i^{-1} \\ R_2 = 2L/K \end{matrix}}$$