

1). Simple

$$\dot{Q} = kA \frac{\Delta T}{L} = 0.78 \times 20 \times \frac{25}{0.4} = \frac{975}{1} \text{ W.}$$

2) Resistance $R_{\text{wall}} = \frac{L}{kA} = \frac{0.4}{0.78 \times 20} = 0.0256 \text{ } ^\circ\text{C/W}$

$$\dot{Q} = \frac{\Delta T}{R_{\text{wall}}} = \frac{25}{0.0256} \approx 976.6 \text{ W.}$$