

(1)

$$Q = KA \frac{\Delta T}{L} = 0.78 \times 20 \times \frac{25}{0.4} = 975(J)$$

(2)

$$R_{\text{wall}} = \frac{L}{KA} = \frac{0.4}{0.78 \times 20} \approx 0.0256(^{\circ}\text{C}/W)$$

$$Q = \frac{\Delta T}{R_{\text{wall}}} = \frac{25}{0.0256} \approx 976.6(J)$$