

Heat transfer, also referred to simply as **heat**, is the movement of **thermal** energy from one thing to another thing of different temperature. ... There are three different ways the **heat** can **transfer**: **conduction** (through direct contact), **convection** (through fluid movement), or **radiation** (through electromagnetic waves).

1. Simple Method

$$Q = KA \frac{\Delta T}{L} = 0.78 \times 20 \times \frac{25}{0.4} = 975 \text{ W}$$

2. Harder Method

$$R_{WALL} = \frac{L}{KA} = \frac{0.4}{0.78 \times 20} \approx 0.0256 \text{ K/W}$$

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