A short summary about the conductive heat transfer and solving the same exercise with L=0.4m, A= 20m2, delta T=25, and K=0.78 W/mK using both simple method and using the resistance concept

## *The answer:*

$$\dot{Q} = kA\frac{\Delta T}{L} = 0.78 * 20 * \frac{25}{0.4} = 975\ W$$

## *Another answer:*

$$R_{wall} = \frac{L}{kA} = \frac{0.4}{0.78 * 20} = 0.0256\ °C/W$$

$$\dot{Q} = \frac{\Delta T}{R_{Wall}} = \frac{25}{0.0256}$$

$$= 976.5W$$