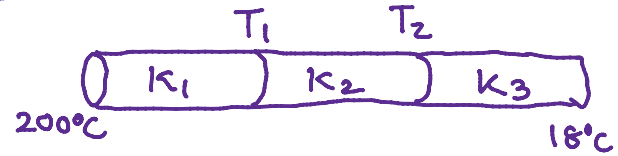


$$l = l_1 = l_2 = l_3 ; A_1 = A_2 = A_3 = A (\text{let})$$

$$K_1 = 2k, K_2 = 4k, K_3 = 3k$$

$$T_1 = ? , T_2 = ?$$



For 1st conductor

$$\frac{\Delta Q}{\Delta t} = K_1 \frac{A(200 - T_1)}{l} \quad \text{--- (1)}$$

For 2nd conductor

$$\frac{\Delta Q}{\Delta t} = K_2 \frac{A(T_1 - T_2)}{l} \quad \text{--- (2)}$$

For 3rd conductor

$$\frac{\Delta Q}{\Delta t} = K_3 \frac{A(T_2 - 18)}{l} \quad \text{--- (3)}$$

by (1) & (2)

$$K_1 \frac{A(200 - T_1)}{l} = K_2 \frac{A(T_1 - T_2)}{l}$$

$$2k(200 - T_1) = \frac{2}{4}k(T_1 - T_2)$$

$$200 - T_1 = \frac{1}{2}T_1 - \frac{1}{2}T_2$$

$$200 = \frac{3}{2}T_1 - \frac{1}{2}T_2 \quad \text{--- (4)}$$