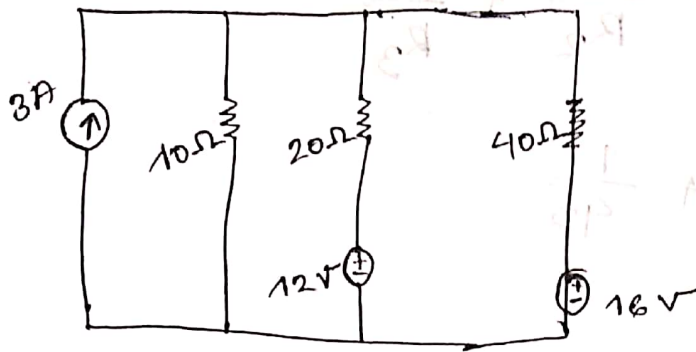


# solution 2 →



By transforming to voltage source & to current source we get,

$$I_2 = \frac{12}{20} = 0.6 \text{ A}$$

and by transforming voltage source 3 to current source we get  $I_3 = \frac{16}{40} = 0.4 \text{ A}$

∴ total current

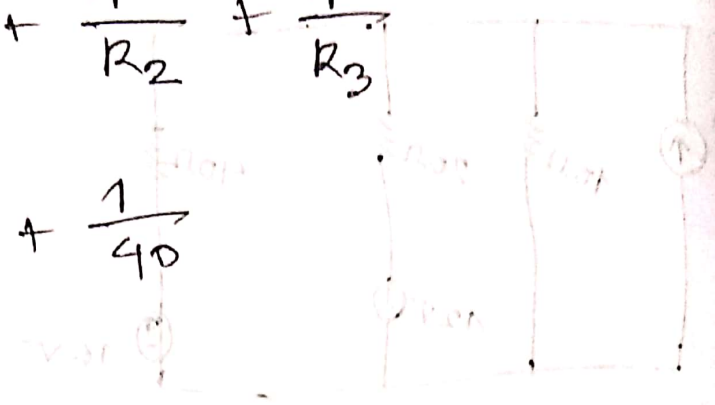
$$\Rightarrow I = I_1 + I_2 + I_3$$

$$= 3 + 0.6 + 0.4$$

$$= 4$$

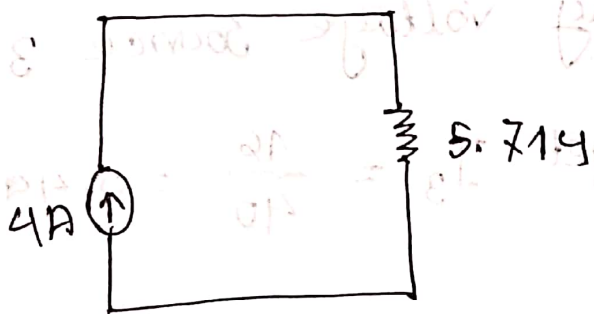
∴ equivalent resistance →

$$\begin{aligned}\frac{1}{R_{eq}} &= \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3} \\ &= \frac{1}{10} + \frac{1}{20} + \frac{1}{40} \\ &= \frac{7}{40}\end{aligned}$$



⇒  $R_{eq} = \frac{40}{7} = 5.714$  ohm

∴ After transforming all the source the new circuit is



(Answer)