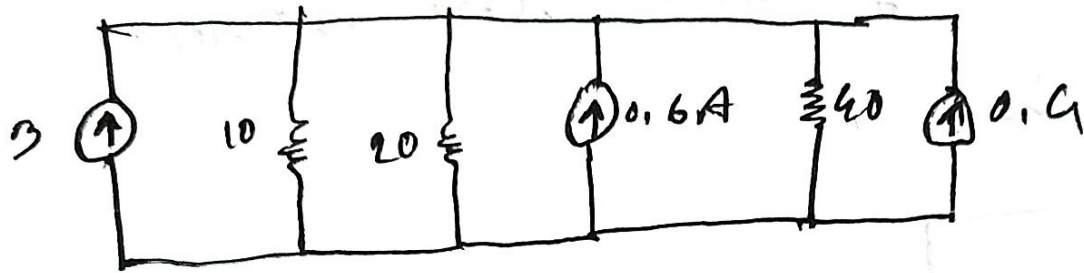


Sol 1-



By transforming to voltage source of current source we get,

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

And by transforming voltage source ~~to~~ to current source we get $I_3 = \frac{10}{40} = 0.4 A$

$$\begin{aligned} \therefore \text{Total current, } I &= I_1 + I_2 + I_3 \\ &= 3 + 0.6 + 0.4 \\ &= 4 A \end{aligned}$$

∴ equivalent resistance,

$$\frac{1}{R_{eq}} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}$$

$$= \frac{1}{10} + \frac{1}{20} + \frac{1}{40}$$

$$= \frac{7}{40}$$

$$\therefore R_{eq} = \frac{40}{7} \\ = 5.714 \Omega$$



∴ After transforming all the source the new circuit is,

