



by transforming to voltage source to current source.  
we get,

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

and by transforming voltage source 9V to current source we get  $I_3 = \frac{16}{40} = 0.4 A$

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

$\therefore$  equivalent resistance  $\rightarrow$

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

$$\Rightarrow R_{eq} = \frac{40}{7} = 5.714$$

$\therefore$  After transform all the source the new circuit is



Ans