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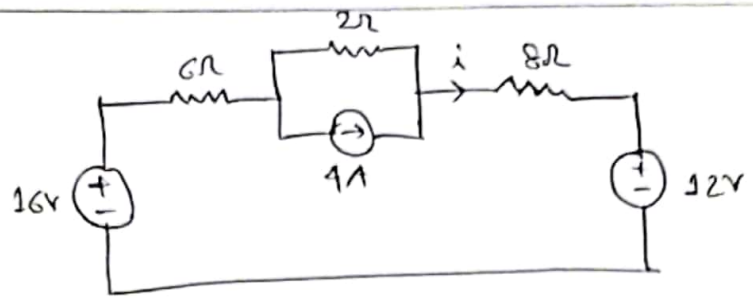
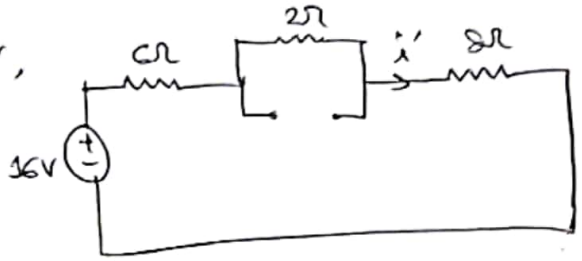


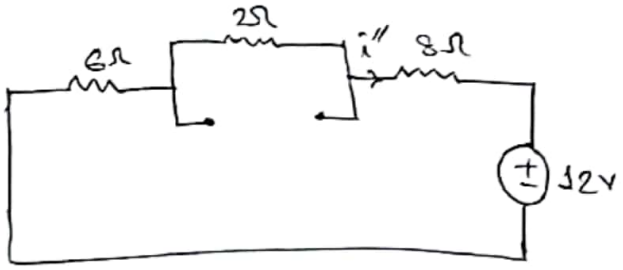
For 16V,



$R_{eq} = 6\Omega + 2\Omega + 8\Omega = 16\Omega$

$\therefore i' = \frac{16V}{16\Omega} = 1A$

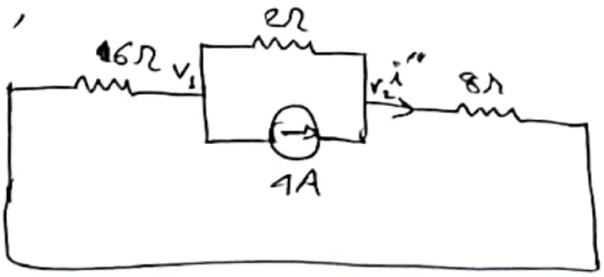
For 12V,



$R_{eq} = 6\Omega + 2\Omega + 8\Omega = 16\Omega$

$\therefore i'' = \frac{-12V}{16\Omega} = -0.75A$ [- because of the current's direction]

For 4A,



Applying KCL at V_1,

$\frac{V_1}{6} + \frac{V_1 - V_2}{2} + 4 = 0$

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$$\Rightarrow \frac{2}{3}V_1 - \frac{V_2}{2} = -4$$

$$\Rightarrow 4V_1 - 3V_2 = -24 \quad \text{——— (1)}$$

Applying KCL at V_2,

$$\frac{V_2 - V_1}{6} - 4 + \frac{V_2}{8} = 0$$

$$\Rightarrow \frac{7}{24}V_2 - \frac{V_1}{6} = 4$$

$$\Rightarrow 7V_2 - 4V_1 = 4$$

$$\Rightarrow 4V_1 = 7V_2 - 4$$

$$\therefore V_1 = \frac{7V_2 - 4}{4} = \frac{7V_2}{4} - 1 \quad \text{——— (2)}$$

From (1),

$$4\left(\frac{7V_2}{4} - 1\right) - 3V_2 = -24$$

$$\Rightarrow 7V_2 - 4 - 3V_2 = -24$$

$$\Rightarrow 4V_2 = -20$$

$$\therefore V_2 = -5\,V$$

$$\therefore i''' = \frac{V_2}{8\Omega} = \frac{-5V}{8\Omega} = -0.63\,A$$

$$\therefore i = i' + i'' + i'''$$

$$= 1A + -0.75A - 0.63A$$

$$= -0.38\,A$$

(Ans)