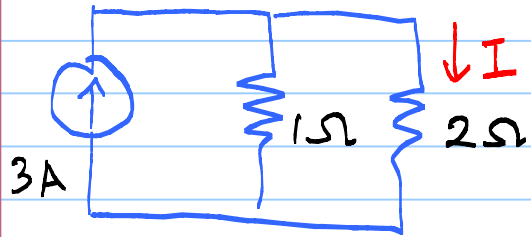


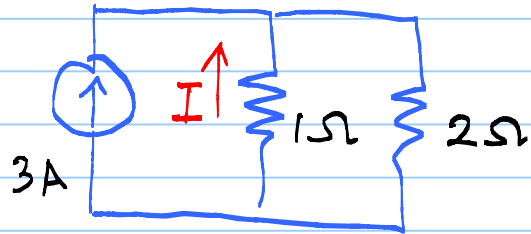
①



Pembagi Arus:

$$I = \frac{1}{1+2} \times 3 = \textcircled{1A}$$

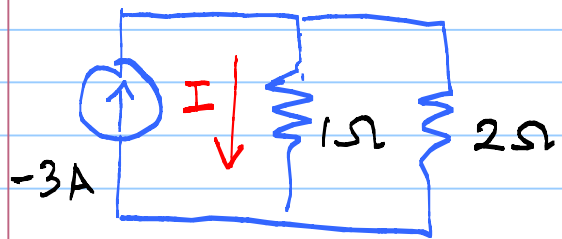
2)



Pembagi Arus :

$$I = \frac{2}{2+1} \times (-3) = -2A$$

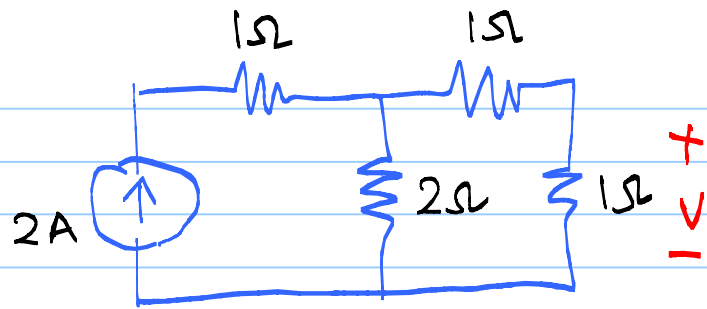
3



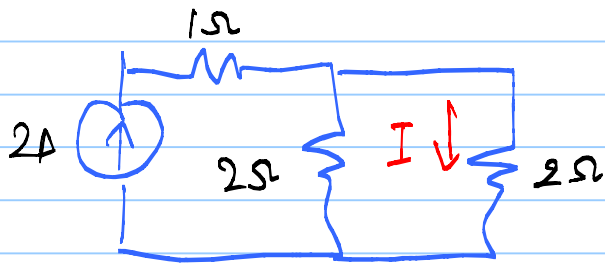
Pembagi Arus :

$$I = \frac{2}{2+1} \times (-3) = -2\text{A}$$

4

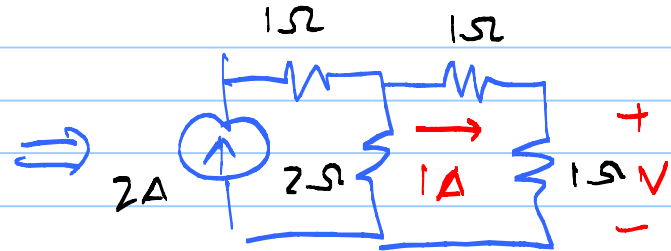


$R_s = 1 + 1 = 2\Omega$



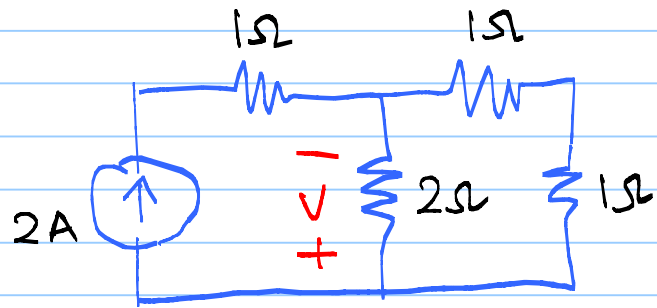
Pembagi Arus :

$$I = \frac{2}{2+2} \times 2 = 1A$$

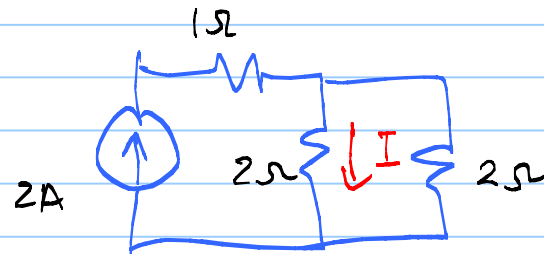


$$V = 1 \times 1 = 1V$$

4

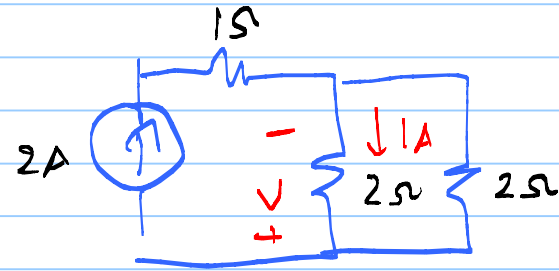


⇒



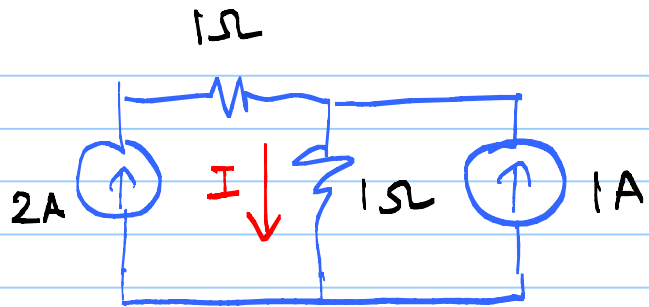
Pembagi Arus :

$$I = \frac{2}{2+2} \times 2 = 1 \text{ A}$$

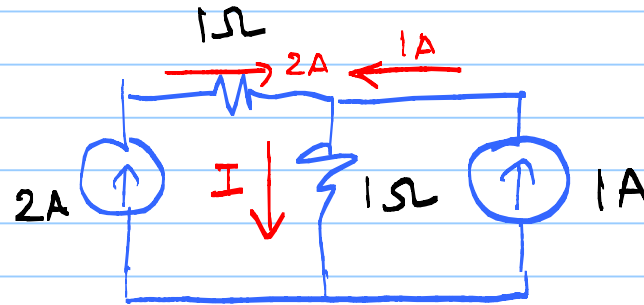


$$V = 2 \times (-1) = -2 \text{ V}$$

5



Hukum Kirchoff I :

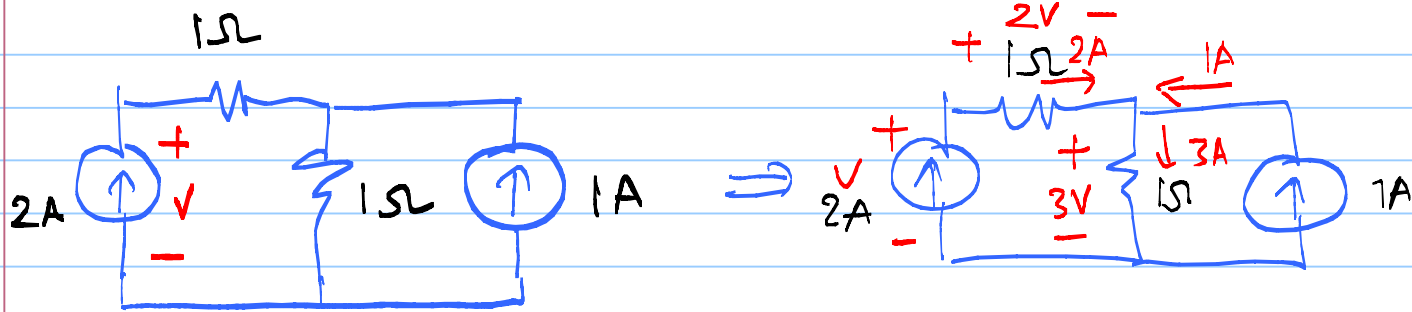


$$\sum I_{\text{keluar}} = \sum I_{\text{masuk}}$$

$$I = 2 + 1$$

$$I = 3A$$

6



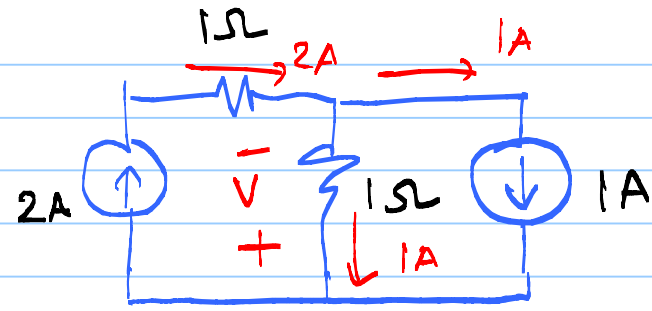
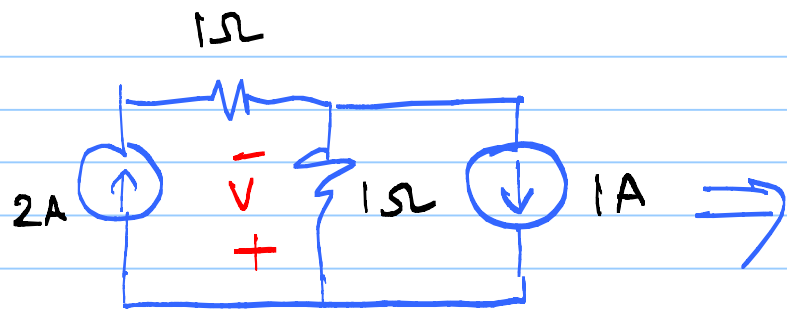
Hukum Kirchhoff II :

$$\sum V = 0$$

$$-V + 2 + 3 = 0$$

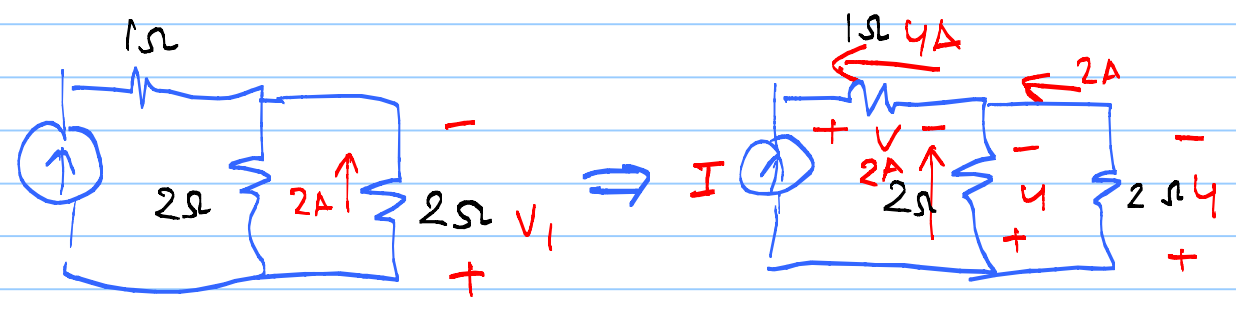
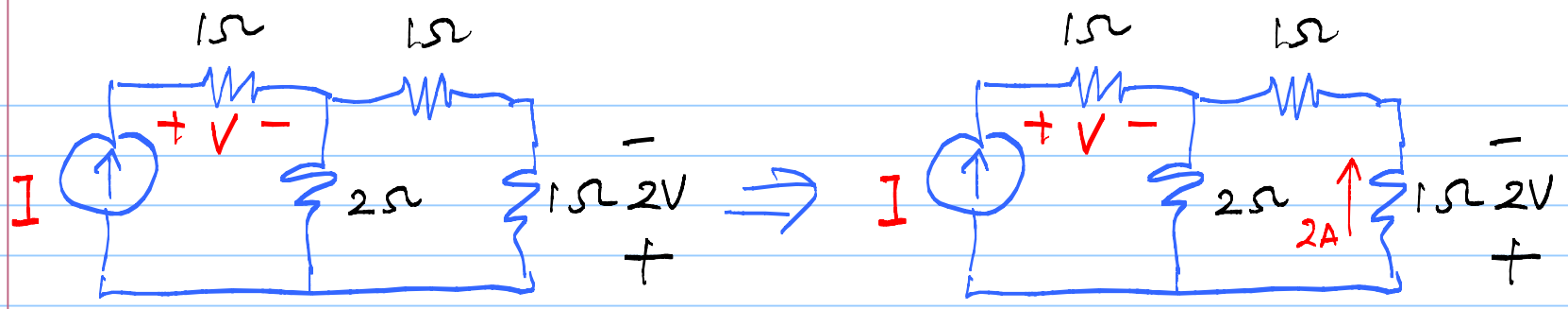
$$V = 5V$$

8



$$V = 1 \times (-1A) = -1V$$

9)

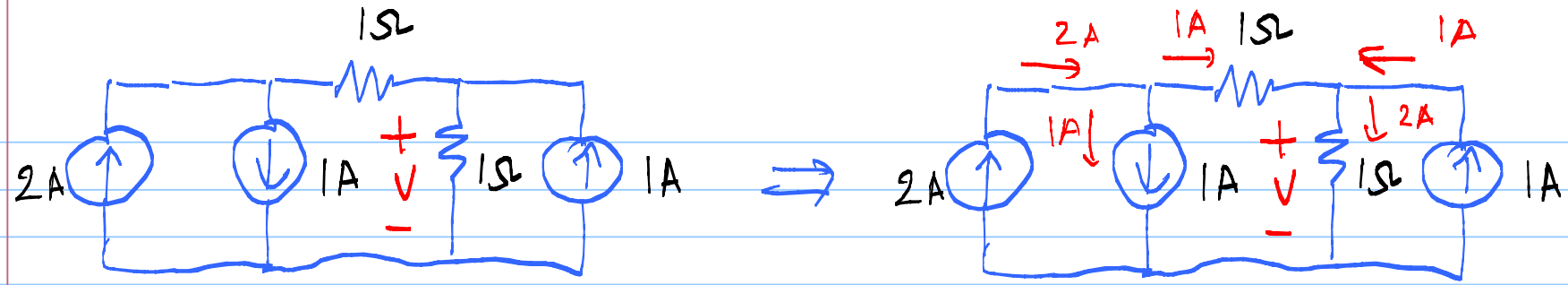


$$V_1 = 2 \times 2 = 4$$

$$V = 1 \times (-4) = -4V$$

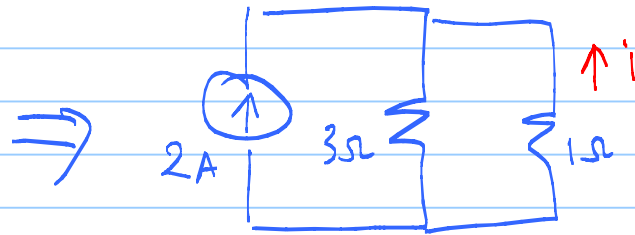
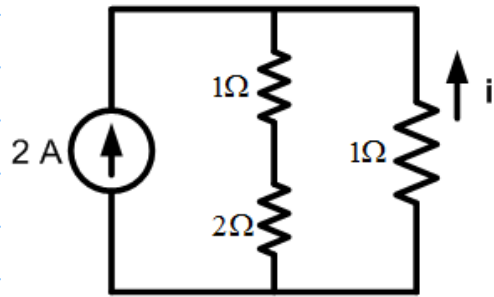
$$I = -4A$$

10



$$V = 1 \times 2 = 2V$$

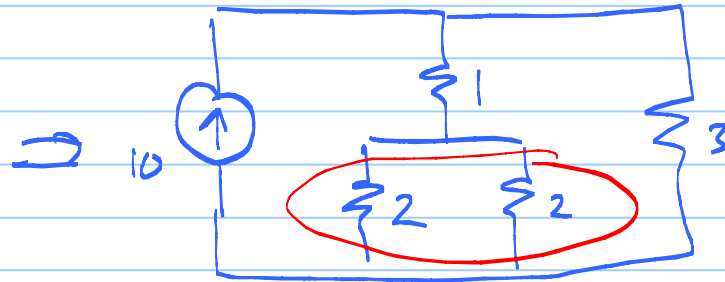
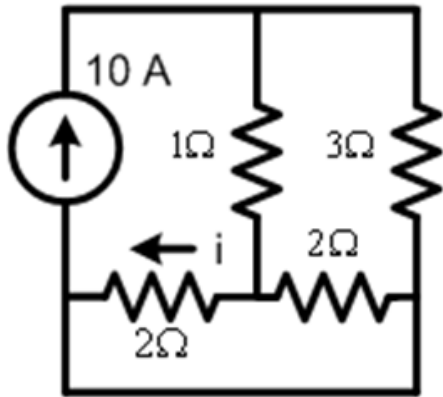
(11)



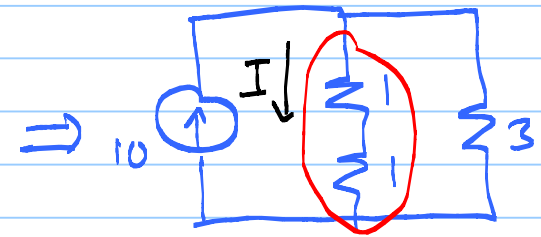
Pembagi Arus :

$$i = \frac{3}{3+1} \times (-2) = -\frac{3}{2} \text{ A}$$

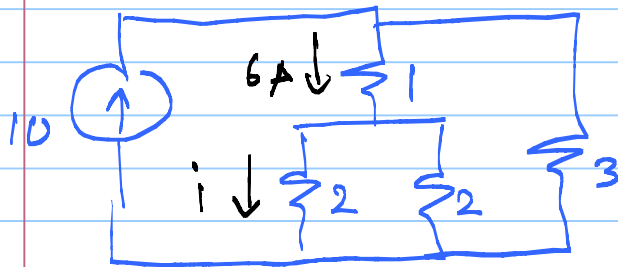
12



$$R_p = \frac{2 \times 2}{2 + 2} = 1$$



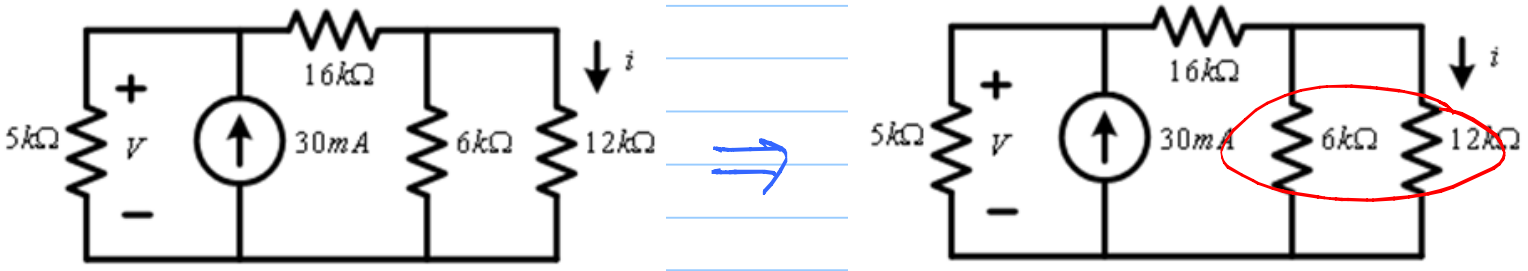
$$R_s = 1 + 1 = 2$$
$$I = \frac{3}{3 + 2} \times 10 = 6A$$



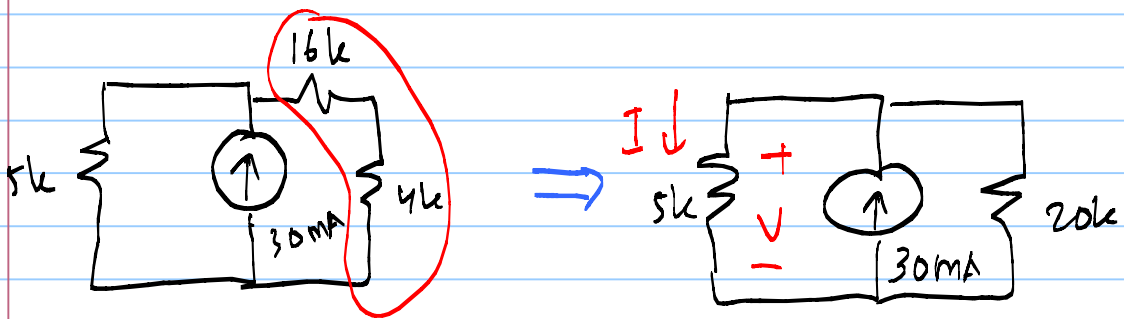
Pembagi Arus:

$$i = \frac{2}{2 + 2} \times 6 = 3A$$

13



$$R_p = \frac{6k \times 12k}{6k + 12k} = 4k$$



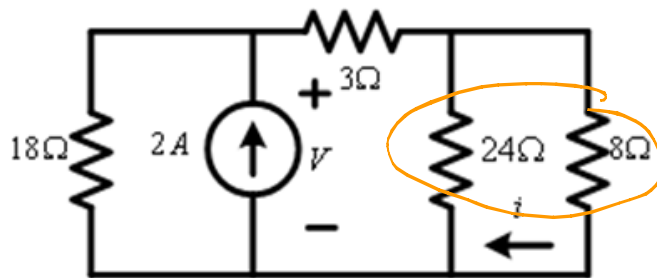
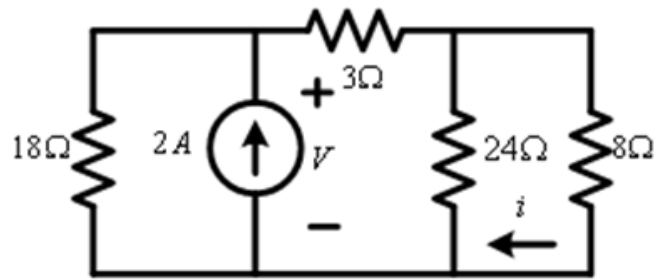
$$R_s = 16k + 4k = 20k$$

Pembagi arus :

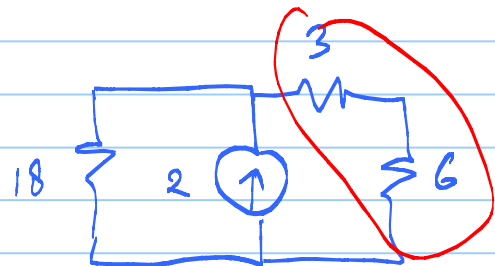
$$I = \frac{20k}{20k + 5k} \times 30mA = 24mA$$

$$V = 5k \times 24mA = 120V$$

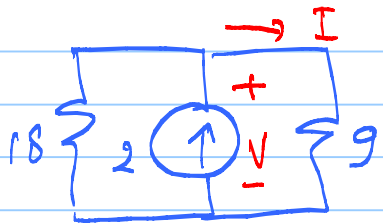
14



$$R_p = \frac{24 \times 8}{24 + 8} = 6\Omega$$

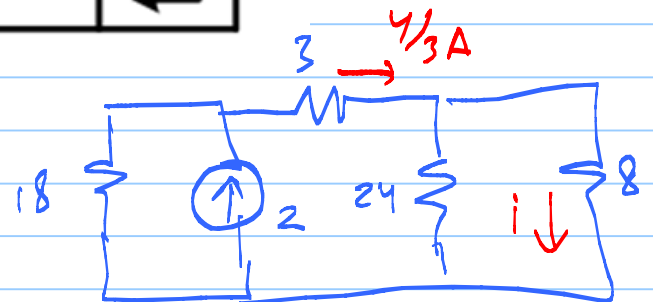


$$R_s = 3 + 6 = 9\Omega$$



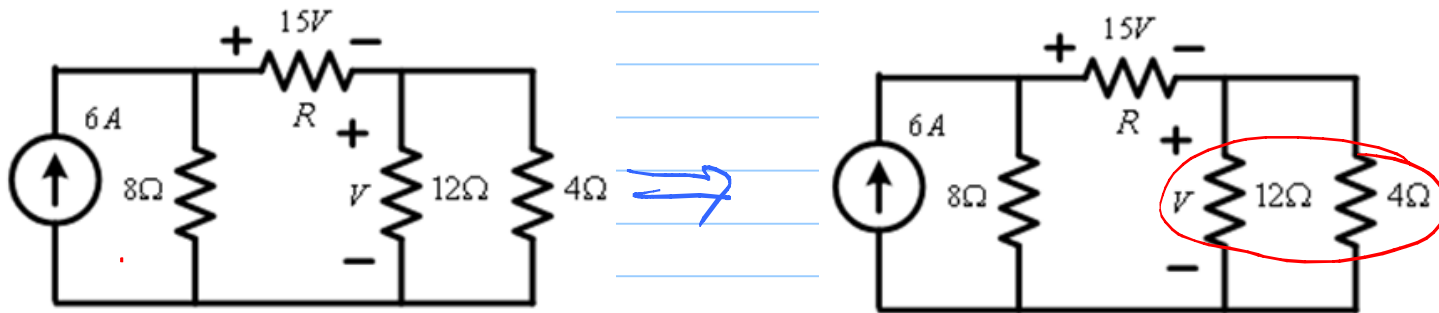
$$I = \frac{18}{18 + 9} \times 2 = \frac{4}{3} \text{ A}$$

$$V = 9 \times \frac{4}{3} = 12 \text{ V}$$

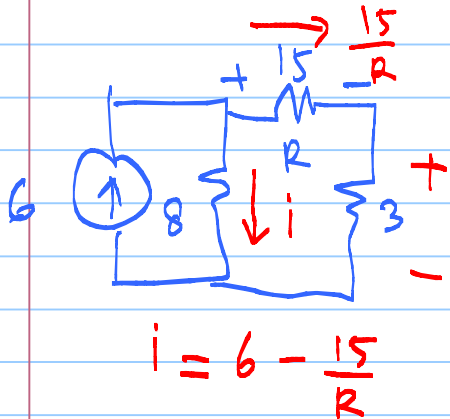


$$i = \frac{24}{24 + 8} \times \frac{4}{3} = 1 \text{ A}$$

15



$$R_p = \frac{12 \times 4}{12 + 4} = 3\Omega$$



$$i = 6 - \frac{15}{R}$$

$$\sum V = 0$$

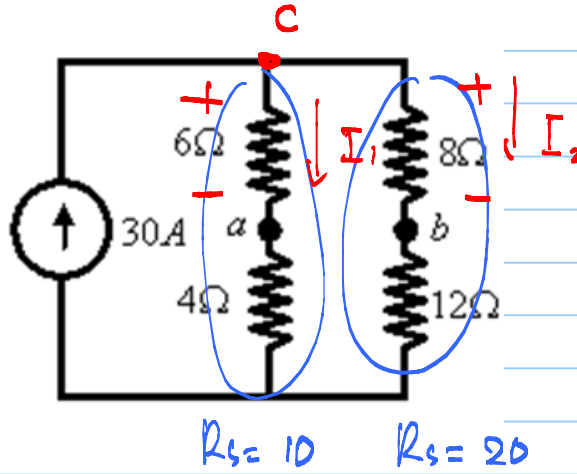
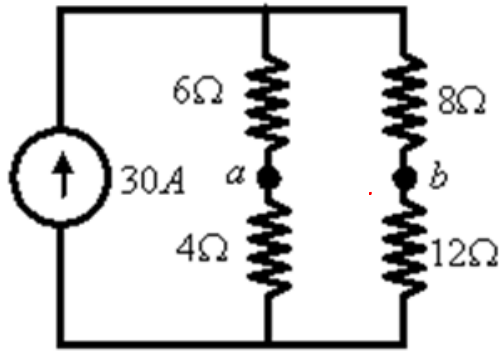
$$15 + 3\left(\frac{15}{R}\right) - 8\left(6 - \frac{15}{R}\right) = 0$$

$$15 + \frac{45}{R} - 48 + \frac{120}{R} = 0 \implies$$

$$15R + 45 - 48R + 120 = 0$$

$$R = \frac{165}{33} \Omega$$

16



$$I_1 = \frac{20}{20+10} \times 30 = 20 \text{ A}$$

$$I_2 = \frac{10}{10+20} \times 30 = 10 \text{ A}$$

$$V_{ca} = 6 \times I_1 = 6 \times 20 = 120 \text{ V}$$

$$V_{cb} = 8 \times I_2 = 8 \times 10 = 80 \text{ V}$$

$$V_{ob} = V_{ac} + V_{cb} = -120 + 80$$

$$V_{ab} = -40 \text{ V}$$

