

P3-6-18

$$a) \quad R_1 = \frac{40 \times 10}{40 + 10} = 8 \Omega$$

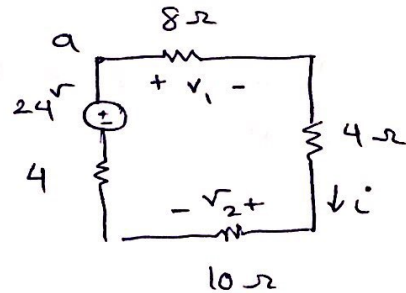
$$R_3 = \frac{12 \times 6}{12 + 6} = 4 \Omega$$

$$R_2 = 4 + \frac{18 \times 9}{18 + 9} = 10 \Omega$$

$$b) \quad i = \frac{24}{4 + 8 + 4 + 10} = \frac{24}{26}$$

$$V_1 = 8 \times \frac{24}{26} = \frac{196}{13}$$

$$V_2 = 10 \times \frac{24}{26}$$



$$c) \quad V_T = 6 \times \frac{12}{13} = \frac{72}{13}$$

$$i_5 = -\frac{1}{3} i = -\frac{12}{39} \text{ A}$$

$$V_2 =$$

$$i_6 = \frac{1}{3} i = \frac{12}{39} \text{ A}$$