

P #2(c)

Ch 18 - pg 578

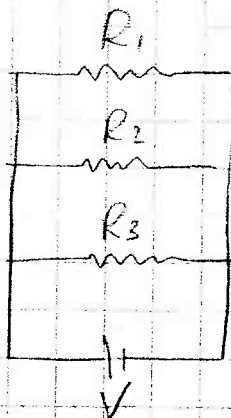
c)

$$R_1 = 4 \Omega$$

$$R_2 = 8 \Omega$$

$$R_3 = 12 \Omega$$

$$V = 24 V$$



$$\begin{aligned} R_p^{-1} &= R_1^{-1} + R_2^{-1} + R_3^{-1} \\ &= (4 \Omega)^{-1} + (8 \Omega)^{-1} + (12 \Omega)^{-1} \end{aligned}$$

$$R_{eq} = 2.2 \Omega$$

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$$V = V_1 = V_2 = V_3 = 24 V$$

$$V_1 = I_1 \cdot R_1$$

$$24 V = I_1 \cdot (4 \Omega)$$

$$I_1 = 6 A$$

$$V_2 = I_2 \cdot R_2$$

$$24 V = I_2 \cdot (8 \Omega)$$

$$I_2 = 3 A$$

$$V_3 = I_3 \cdot R_3$$

$$24 V = I_3 \cdot (12 \Omega)$$

$$I_3 = 2 A$$