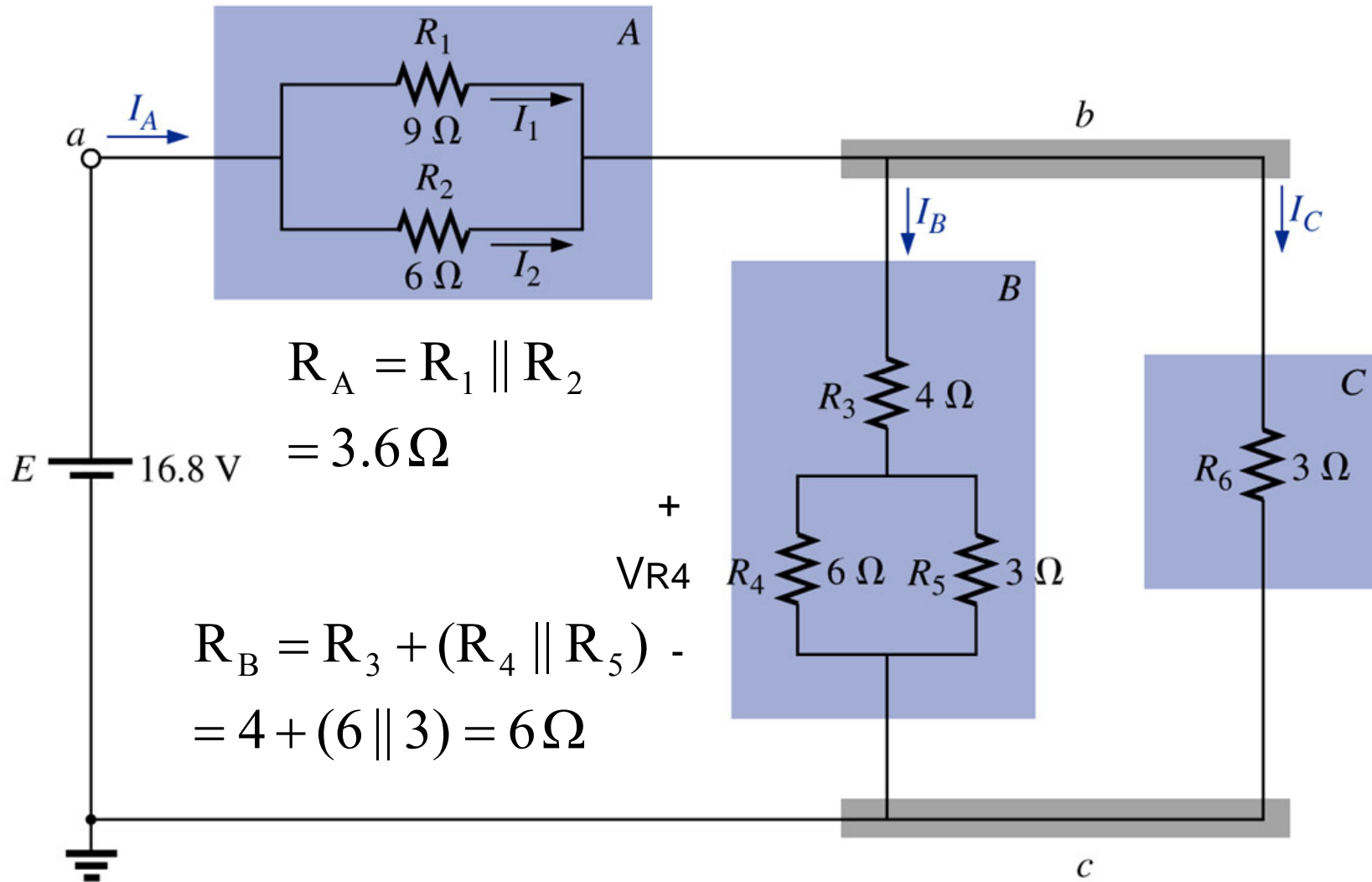
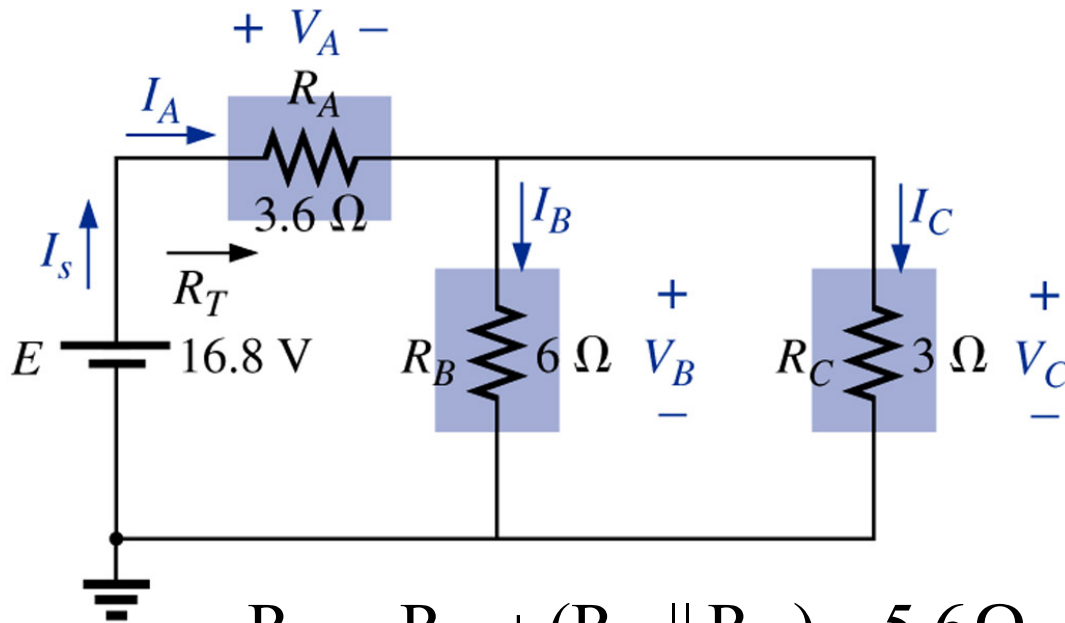


Breakout #1 – Find I_1 , I_B , I_C , V_{R4}



Breakout #1 – Find I_1 , I_B , I_C , V_{R4}



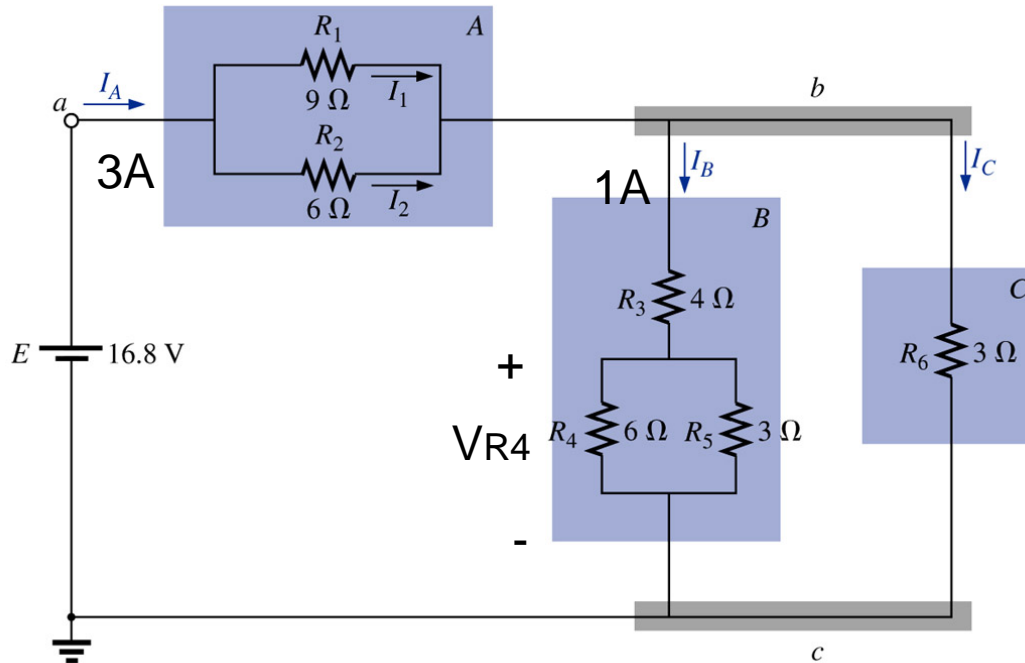
$$I_C = I_A - I_B \\ = 2 \text{ A}$$

$$R_T = R_A + (R_B \parallel R_C) = 5.6 \Omega$$

$$I_S = I_A = \frac{E}{R_T} = \frac{16.8 \text{ V}}{5.6 \Omega} = 3 \text{ A}$$

$$I_B = I_A \frac{R_B \parallel R_C}{R_B} = 3 \text{ A} \frac{2 \Omega}{6 \Omega} = 1 \text{ A}$$

Breakout #1 – Find I_1 , I_B , I_C , V_{R4}



$$V_{R4} = I_B \cdot (R_4 \parallel R_5)$$

$$V_{R4} = 1\text{ A} \cdot 2\Omega$$

$$= 2\text{ V}$$

$$I_1 = I_A \frac{R_A}{R_1} = 3\text{ A} \frac{3.6\Omega}{9\Omega} = 1.2\text{ A}$$