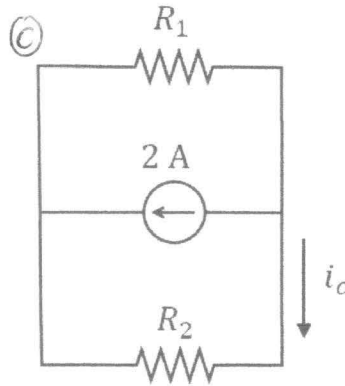
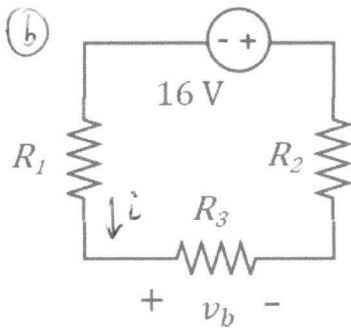
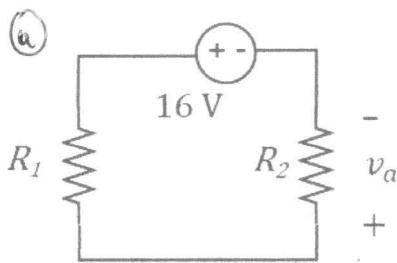


Find  $v_a$ ,  $v_b$  and  $i_c$ .

$$R_1 = 2 \Omega$$

$$R_2 = 6 \Omega$$

$$R_3 = 2 \Omega$$



(a) VOLTAGE DIVIDER:  $V_a = 16 \cdot \frac{R_2}{R_1 + R_2} = 16 \cdot \frac{6}{2 + 6} = 12$

$$\boxed{V_a = 12V}$$

(b) VOLTAGE DIVIDER:  $V_b = (-16) \cdot \frac{R_3}{R_1 + R_2 + R_3} = (-16) \cdot \frac{2}{2 + 6 + 2} = -3.2$

$$\boxed{V_b = -3.2V}$$

BTW: WHERE THIS COMES FROM

$$I = \frac{(-16)}{R_1 + R_2 + R_3} \quad \text{AND} \quad V_b = R_3 \cdot I$$

$$\Rightarrow V_b = (-16) \cdot \frac{R_3}{R_1 + R_2 + R_3}$$

(c) CURRENT DIVIDER:  $i_c = (-2) \cdot \frac{R_1}{R_1 + R_2} = (-2) \cdot \frac{2}{2 + 6} = -0.5$

$$\boxed{i_c = -0.5A}$$