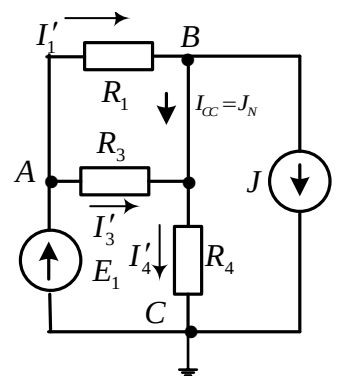
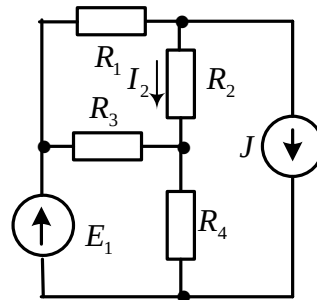
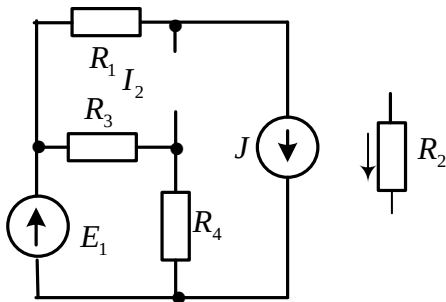


Exemplo Teorema de Norton

Calcular a corrente assinalada no circuito dado utilizando o Teorema de Norton.

$$E_1 = 100 \text{ V} ; J = 6 \text{ A} ; R_1 = 2,5 \Omega$$

$$R_2 = 10 \Omega ; R_3 = 40 \Omega ; R_4 = 20 \Omega$$



$$\varphi_C = 0 \quad \varphi_A = E_1 = 100 \text{ V}$$

$$\varphi_B (G_1 + G_3 + G_4) - \varphi_A (G_3 + G_1) = -J$$

$$\varphi_B = \frac{\varphi_A (G_3 + G_1) - J}{G_1 + G_3 + G_4} = 76,84 \text{ V}$$

$$I_{CC} = I_1' - J = 3,26 \text{ A}$$

$$E_1 = 100 \text{ V} ; J = 6 \text{ A} ; R_1 = 2,5 \Omega$$

$$R_2 = 10 \Omega ; R_3 = 40 \Omega ; R_4 = 20 \Omega \quad I_1' = (\varphi_A - \varphi_B) G_1 = 9,26 \text{ A}$$

$$I_2 = J_N \frac{R_N}{R_N + R_2} = 1,99 \text{ A} \quad R_{AB} = R_N = R_1 + \frac{R_3 R_4}{R_3 + R_4} = 15,83 \Omega$$

$$I_3' = (\varphi_A - \varphi_B) G_3 = 0,58 \text{ A}$$

$$I_4' = \varphi_B G_4 = 3,84 \text{ A}$$

