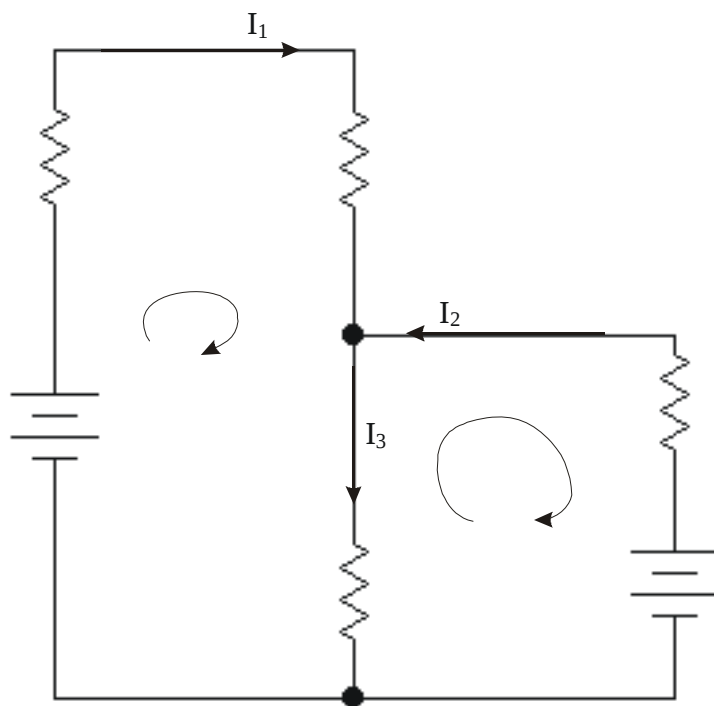
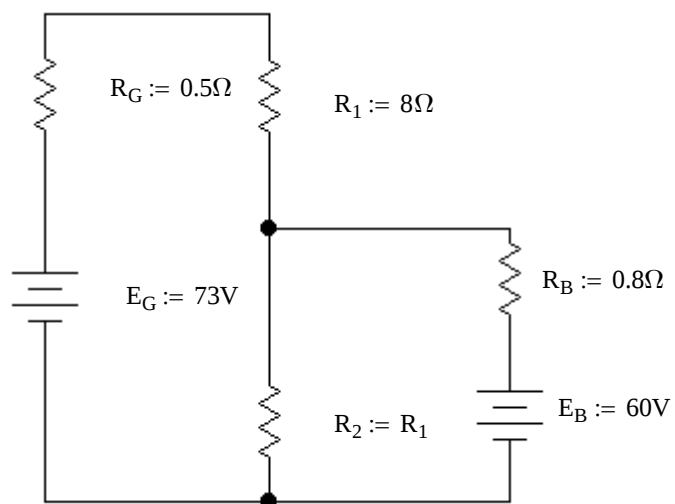


opgave 2.46



a: beregn alle strømme i kredsen:



$$I_3 = I_1 + I_2$$

$$E_G = I_1 \cdot (R_G + R_1) + (I_1 + I_2) \cdot R_2$$

$$-E_B = -I_2 \cdot R_B - (I_1 + I_2) \cdot R_2$$

$$\text{Find}(I_1, I_2, I_3) = \begin{pmatrix} 2 \\ 5 \\ 7 \end{pmatrix} \text{ A}$$

b generatorens og batteriets klemspænding

$$U_G := E_G - I_1 \cdot R_G = 72 \text{ V}$$

$$U_G = 72 \text{ V}$$

$$U_B := E_B - I_2 \cdot R_B = 56 \text{ V}$$

$$U_B = 56 \text{ V}$$

c: effekten der afsættes i modstanden R1 og R2

$$P_1 := I_1^2 \cdot R_1 = 32 \text{ W}$$

$$P_1 = 32 \text{ W}$$

$$P_2 := I_3^2 \cdot R_2 = 392 \text{ W}$$

$$P_2 = 392 \text{ W}$$

opgave 2.46