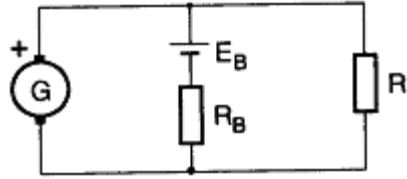


opgave 2.44



$$E_{\text{generator}} := 100 \cdot \text{V} \quad E_{\text{batteri}} := 95 \cdot \text{V}$$

$$R_{\text{generator}} := 2 \cdot \Omega \quad R_{\text{batteri}} := 1 \cdot \Omega \quad R_{\text{belastning}} := 40 \cdot \Omega$$

$$\left(\begin{array}{l} I_1 + I_2 = I_3 \\ E_{\text{generator}} - E_{\text{batteri}} = I_1 \cdot R_{\text{generator}} - I_2 \cdot R_{\text{batteri}} \\ E_{\text{batteri}} = I_2 \cdot R_{\text{batteri}} + I_3 \cdot R_{\text{belastning}} \end{array} \right) \text{solve}, I_1, I_2, I_3 \rightarrow \left(\frac{150 \cdot \text{V}}{61 \cdot \Omega} \quad -\frac{5 \cdot \text{V}}{61 \cdot \Omega} \quad \frac{145 \cdot \text{V}}{61 \cdot \Omega} \right) = (2)$$

$$\left(\begin{array}{l} I_1 + I_2 = I_3 \\ E_{\text{generator}} + E_{\text{batteri}} = I_1 \cdot R_{\text{generator}} - I_2 \cdot R_{\text{batteri}} \\ -E_{\text{batteri}} = I_2 \cdot R_{\text{batteri}} + I_3 \cdot R_{\text{belastning}} \end{array} \right) \text{solve}, I_1, I_2, I_3 \rightarrow \left(\frac{3950 \cdot \text{V}}{61 \cdot \Omega} \quad -\frac{3995 \cdot \text{V}}{61 \cdot \Omega} \quad -\frac{45 \cdot \text{V}}{61 \cdot \Omega} \right)$$

$$(1.459 \quad -0.082 \quad 2.377) \text{ A}$$

$$\left(\frac{I}{2}\right) = (64.754 \quad -65.492 \quad -0.738) \text{ A}$$