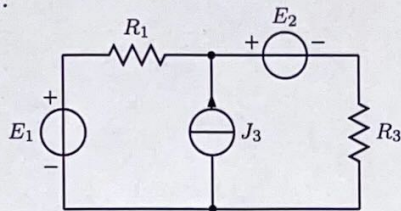


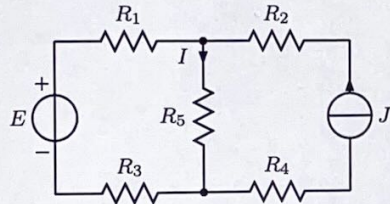
1.



Laske kerrostamalla vastuksessa R_1 kuluva teho P_1 .

$$\begin{aligned} R_1 &= 1 \, \Omega & R_2 &= 2 \, \Omega & E_1 &= 12 \, \text{V} \\ E_2 &= 3 \, \text{V} & J_3 &= 2 \, \text{A}. \end{aligned}$$

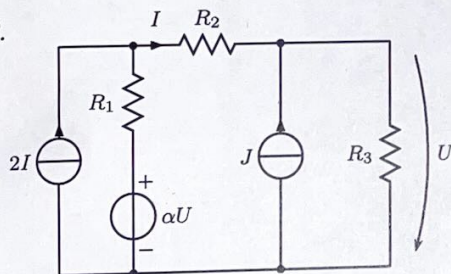
2.



Laske Nortonin menetelmällä vastuksen R_5 virta I .

$$\begin{aligned} J &= 1 \, \text{A} & E &= 2 \, \text{V} & R_1 &= 1 \, \Omega \\ R_2 &= 3 \, \Omega & R_3 &= 5 \, \Omega & R_4 &= 7 \, \Omega \\ R_5 &= 9 \, \Omega. \end{aligned}$$

3.



Laske jännite U .

$$\begin{aligned} R_1 &= 1 \, \Omega & R_2 &= 1/2 \, \Omega & R_3 &= 1/3 \, \Omega \\ J &= 2 \, \text{A} & \alpha &= 3. \end{aligned}$$