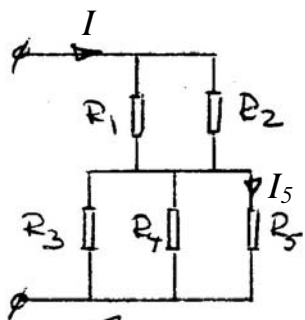
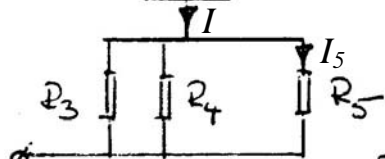
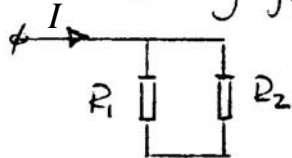


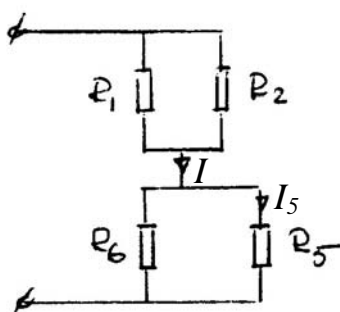
A1.2 a)



Drita ny fig! (förenkla!)



$$R_6 = R_3 // R_4 = \frac{R_3 \cdot R_4}{R_3 + R_4} = \frac{8 \cdot 12}{8 + 12} = 4,8 \Omega$$



Strömdelningslagen ger:

$$I_5 = I \cdot \frac{R_6}{R_6 + R_5} = 10 \cdot \frac{4,8}{4,8 + 10} = 3,24 \text{ A}$$

b)

$$E = R_{TOT} \cdot J$$

$$R_{TOT} = \left(\frac{1}{R_1} + \frac{1}{R_2} \right)^{-1} + \left(\frac{1}{R_3} + \frac{1}{R_4} + \frac{1}{R_5} \right)^{-1}$$

$$\Rightarrow R_{TOT} \approx 5,6 \Omega$$

$$\Rightarrow E \approx 5,6 \cdot 10 = \underline{56 \text{ V}}$$