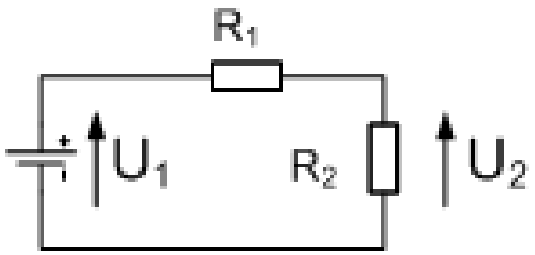
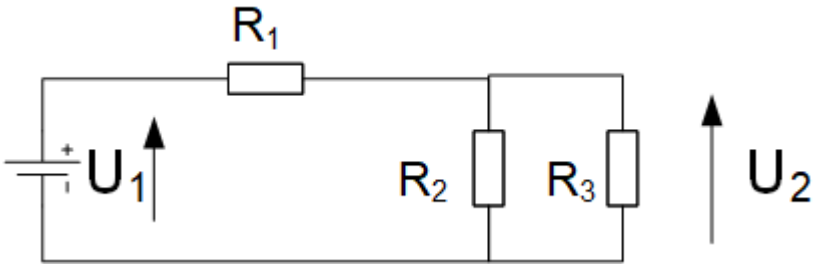


I kretsen til venstre er U_1 = 5,0 [V], R_1= 1500 [Ω] og R_2= 2000 [Ω]

Hvor stor er strømmen I, og spenningen U_2.

$$I = \frac{U_1}{(R_1+R_2)} = \frac{5{,}0\ [V]}{(1500+2000)\ [\Omega]} = 0{,}00143\ [A] = 1{,}43\ \cdot\ 10^{-3}\ [A] = 1{,}43\ [mA]$$

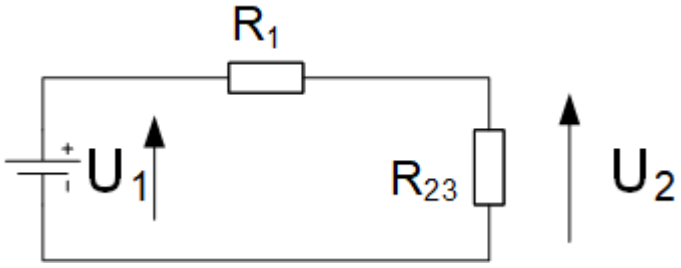
$$U_2 = I \cdot R_2 = 1{,}43 \cdot 10^{-3} \cdot 2000\ [A \cdot \Omega] = 2{,}86\ [V]$$



I Kretsen til venstre er U_1= 10,0 [V], R_1= 1000 [Ω], R_2=R_3= 2000 [Ω]

Hvor stor er spenningen U_2.

Lager et ekvivalentskjema, hvor R_{23} er parallell-koblingen av R_2 og R_3.



$$R_{23} = \frac{R_2 \cdot R_3}{R_2 + R_3} = \frac{2000\ [\Omega] \cdot 2000\ [\Omega]}{2000\ [\Omega] + 2000\ [\Omega]} = \frac{4000000}{4000}\ [\Omega] = 1000\ [\Omega]$$

$$U_2 = I \cdot R_{23} = \frac{U_1}{(R_1 + R_{23})} \cdot R_{23} = \frac{10{,}0\ [V]}{(1000 + 1000)\ [\Omega]} \cdot 1000\ [\Omega] = 5{,}0\ [V]$$