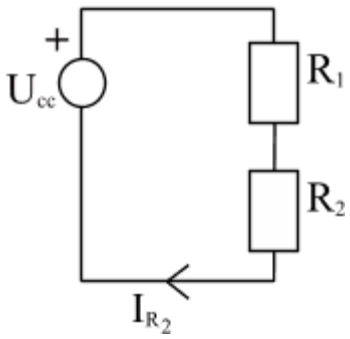
Opgave 4.1

Fig. 4



$R_{1\_1} := 10k\Omega$

$R_{2\_1} := 10k\Omega$

$I_{R2\_1} := 1mA$

$U_{R1\_1} := R_{1\_1} \cdot I_{R2\_1} = 10\,V$

$U_{R2\_1} := R_{2\_1} \cdot I_{R2\_1} = 10\,V$

$U_{cc\_1} := U_{R2\_1} + U_{R1\_1} = 20\,V$

Opgave 4.2

$R_{1\_2} := 1k\Omega$

$R_{2\_2} := 1k\Omega$

$U_{cc\_2} := 12V$

$R_{12\_2} := R_{1\_2} + R_{2\_2}$

$$I_{R2\_2} := \frac{U_{cc\_2}}{R_{12\_2}} = 6\,mA$$

Opgave 4.3

$P_{R1\_1} := U_{R1\_1} \cdot I_{R2\_1} = 10\,mW$

$P_{R2\_1} := U_{R2\_1} \cdot I_{R2\_1} = 10\,mW$

$P_{R1\_2} := I_{R2\_2}^{2} \cdot R_{1\_2} = 36\,mW$

$P_{R2\_2} := I_{R2\_2}^{2} \cdot R_{2\_2} = 36\,mW$