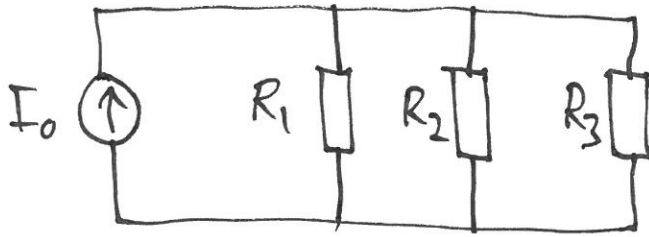


1-8) a)



$$R_1 = 4 \Omega$$

$$R_2 = 3 \Omega$$

$$R_3 = 6 \Omega$$

$$I_0 = 12 \text{ mA}$$

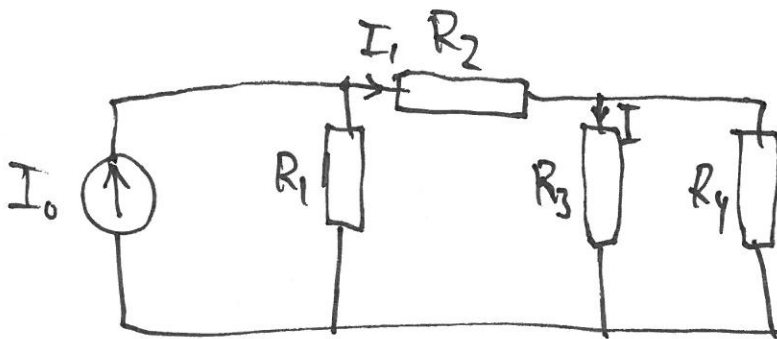
$$R_2 \parallel R_3 = \frac{3 \cdot 6}{3 + 6} = 2 \Omega$$

Stromteilung:

$$I = \frac{R_2 \parallel R_3 \cdot I_0}{R_1 + R_2 \parallel R_3} = \frac{2 \cdot 12 \text{ mA}}{4 + 2} = 4 \text{ mA}$$

$$I = 4 \text{ mA}$$

b)



$$R_1 = 4,00 \Omega$$

$$R_2 = 1,25 \Omega$$

$$R_3 = 1,00 \Omega$$

$$R_4 = 3,00 \Omega$$

$$I_0 = 12 \text{ mA}$$

Stromteilung:

$$I_1 = \frac{R_1 \cdot I_0}{R_1 + R_2 + R_3 \parallel R_4} = \frac{4 \cdot 12 \text{ mA}}{4 + 1,25 + \frac{1 \cdot 3}{1 + 3}} = \frac{48 \text{ mA}}{6} = 8 \text{ mA}$$

Stromteilung igen:

$$I = \frac{R_4 \cdot I_1}{R_3 + R_4} = \frac{3 \cdot 8 \text{ mA}}{1 + 3} = 6 \text{ mA}$$

$$I = 6 \text{ mA}$$