

ERT 16

Opg 4)  $u_i = u_x$

$$\frac{u_o}{R_1 + R_2} - \frac{u_x}{R_1} = 0$$

$$u_o = \frac{u_x}{R_1} \cdot (R_1 + R_2)$$

$$u_o = u_x \left( 1 + \frac{R_2}{R_1} \right)$$

$$u_o = \left( 1 + \frac{R_2}{R_1} \right) u_i$$

Opg 5)  $u_x = 0$

$$u_o = -\frac{R_2}{R_1} u_i$$

$$u_x - u_i = i R_1$$

$$u_o - u_x = i R_2$$

$$u_x = 0$$

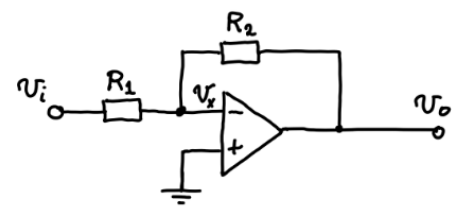
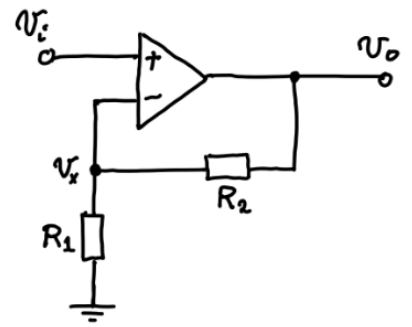
$$-u_i = i R_1 \quad i = -\frac{u_i}{R_1}$$

$$u_o = i R_2$$

$$i = \frac{u_o}{R_2}$$

$$\frac{u_o}{R_2} = -\frac{u_i}{R_1}$$

$$u_o = -u_i \frac{R_2}{R_1}$$



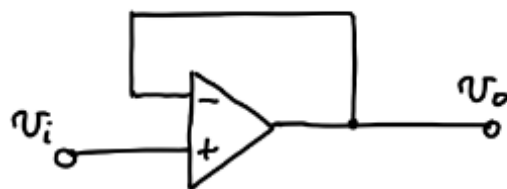
Figur 3: Inverterende forsterker

Opg 7

a)

$$v_i - v_o = 0$$

$$v_i = v_o$$



**Figur 5:** En snodig liten krets

Opg 10

