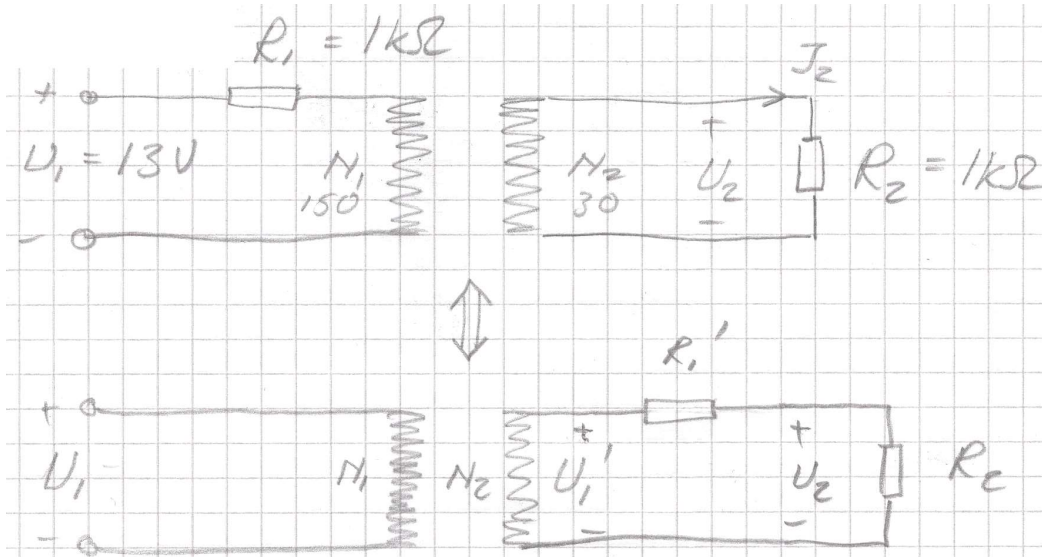
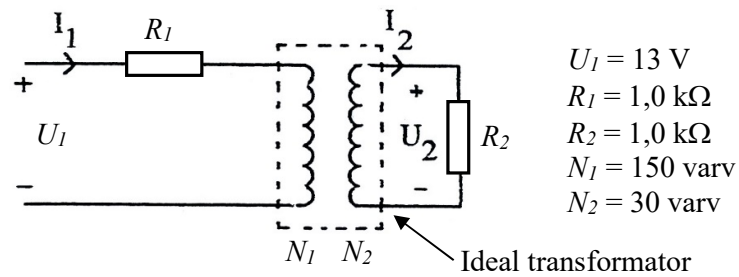


B4.7 En ideal transformator är ansluten som figuren nedan visar. Bestäm U_2 och I_2 .



$$\frac{U_1}{U_1'} = \frac{N_1}{N_2} \quad \frac{13}{U_1'} = \frac{150}{30}$$

$$\Rightarrow U_1' = 2,6 \text{ V}$$

$$\frac{R_1}{R_1'} = \left(\frac{N_1}{N_2}\right)^2 \Rightarrow R_1' = 40 \Omega$$

$$U_2 = U_1' \cdot \frac{R_2}{R_1' + R_2} = \underline{\underline{2,5 \text{ V}}}$$