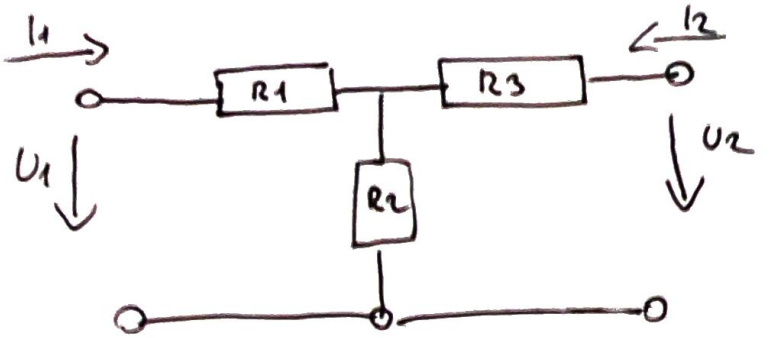
Ela 2. óra

09.19

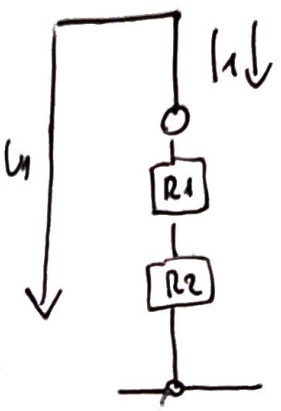


$$U_1 = Z_{11}\, I_1 + Z_{1,2}\, I_2$$

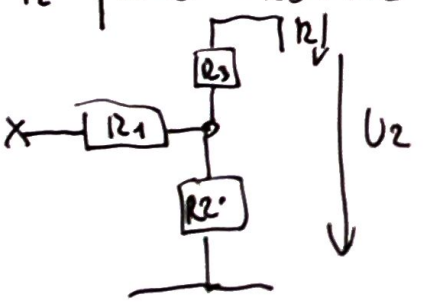
$$U_2 = Z_{2,1}\, I_1 + Z_{2,2}\, I_2$$

$$Z_{1,1} = \left.\frac{U_1}{I_1}\right|_{I_2=0}$$

$= R_1 + R_2$

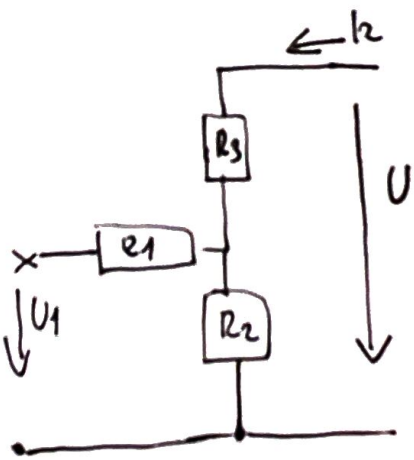


$$Z_{2,2} = \left.\frac{U_2}{I_2}\right|_{I_1=0} = R_3 + R_2$$



$$U_2 = I_2 (R_3 + R_2)$$

$$Z_{1,2} = \left.\frac{U_1}{I_2}\right|_{I=0}$$



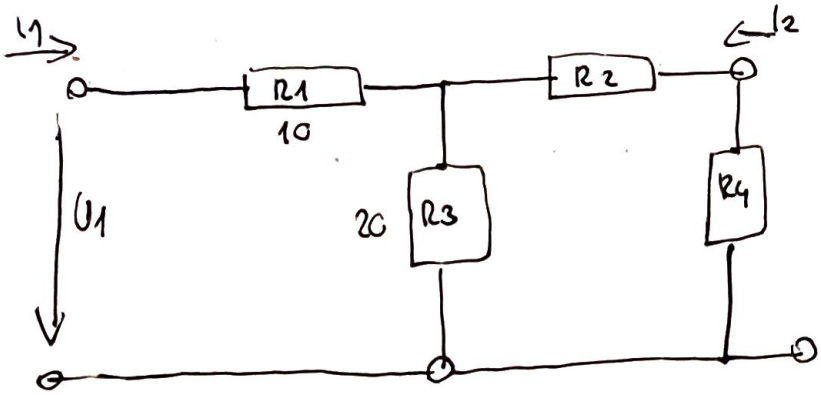
$$U_1 = U_{R2} = I_2 R_2$$

$$Z_{12} = R_2$$

$$Z_{2,1} \left.\frac{U_2}{I_1}\right|_{I_2=0}$$

$= R_2$

$$U_1 = I_1 \cdot R_2$$

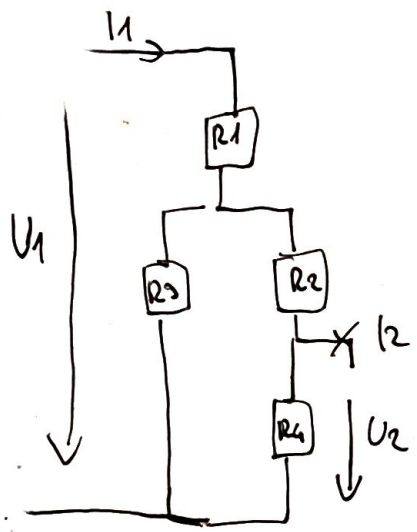


Hf/ $z_{2,2}$

$z_{1,2}$

$$z_{1,1} = \frac{U_1}{I_1}\Big|_{I_2=0}$$ szakadással lezárom

$$z_{1,1} = R_1 + R_3 \times (R_2 + R_4)$$



$$U_1 = R_1 + (R_3 \times (R_2 + R_4)) \cdot I_1$$

$$z_{2,1} = \frac{U_2}{I_1}\Big|_{I_2=0} = \frac{R_3 \cdot R_4}{R_1+R_2+R_3}$$

$$U_2 = \frac{R_3}{R_1+R_2+R_3} \cdot I_1 \cdot R_4$$

$I(t) = C \cdot \frac{du(t)}{dt}$ $u(t) = L \cdot \frac{di(t)}{dt}$ nem lehet hirtelen változás