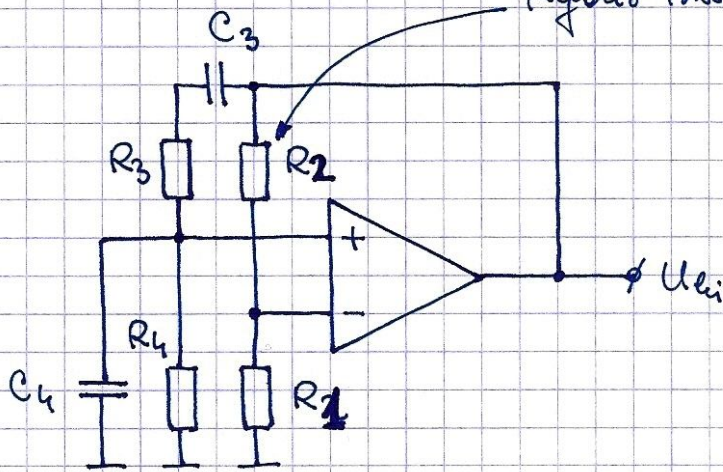


negatív visszacsatoló' ellenállás

25.



$$R_2 = 10 \text{ k}\Omega$$

$$f_0 = 50 \text{ kHz}$$

$$R_3 = R_4 = R$$

$$C_3 = C_4 = C$$

a.)

b.) 
$$\frac{R_1}{R_1 + R_2} = \frac{1}{3} \Rightarrow R_2 = 2 \cdot R_1 \Rightarrow R_1 = \frac{R_2}{2} = \frac{10 \text{ k}}{2} = \underline{\underline{5 \text{ k}\Omega}}$$

c.)  $R$  - a bemeneti nyugalmi áramot is beállító ellenállás.

$\Downarrow$

$$R = R_1 \times R_2 \approx \underline{\underline{3,33 \text{ k}\Omega}}$$

d.) 
$$f_0 = \frac{1}{2\pi \cdot R \cdot C} \Rightarrow C = \frac{1}{2\pi \cdot f_0 \cdot R} = \frac{1}{2\pi \cdot 5 \cdot 10^4 \cdot 3,33 \text{ k}} \approx \underline{\underline{1 \text{ nF}}}$$