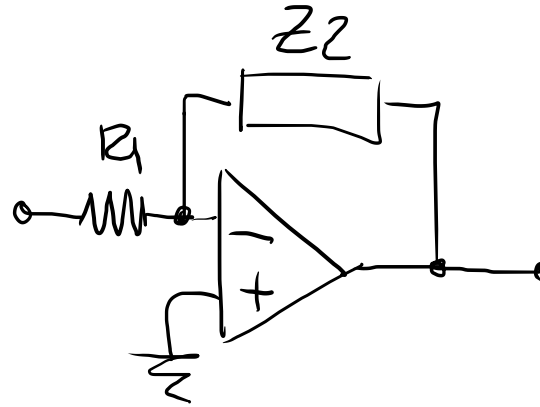
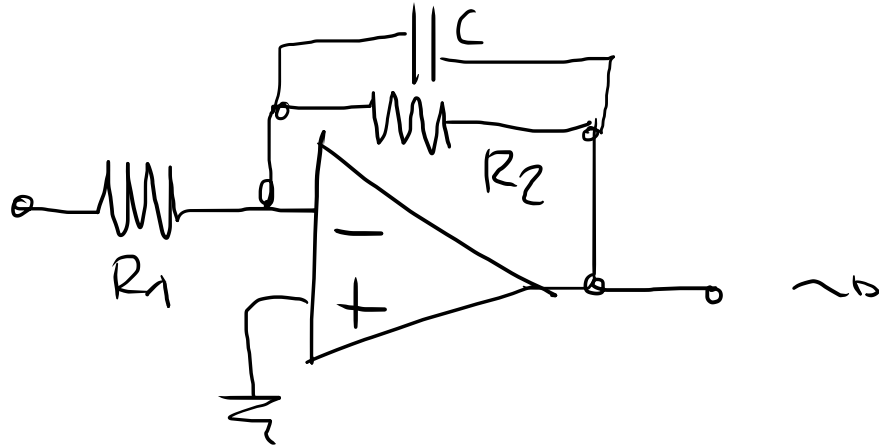


EZSS.



$$A_v = \frac{V_o}{V_i} = - \frac{R_2}{R_1}$$

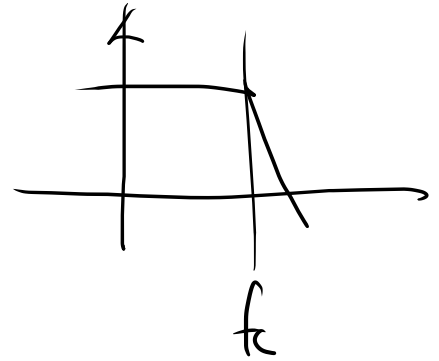
$$= - \frac{Z_2}{R_1}$$

$$Z_2 = \frac{1}{\frac{1}{R_T}} = \frac{1}{\frac{1}{R_2} + \frac{1}{R_1}} = \frac{R_1 + R_2}{\frac{R_2 \cdot R_1}{R_1 + R_2}} =$$

$$R_T = \frac{R_1 \cdot R_2}{R_1 + R_2}$$

$$Z_2 = \frac{Z_C \cdot R_2}{Z_C + R_1} = \frac{\frac{1}{sC} \cdot R_2}{\frac{1}{sC} + R_1}$$

$$Z_2 = \frac{\frac{R_2}{sC}}{sCR_2 + 1} = \frac{R_2}{1 + sCR_2}$$



$$A_v = - \frac{Z_2}{R_1} = - \frac{R_2}{1 + sCR_2} \cdot \frac{1}{R_1} = - \frac{R_2}{R_1} \cdot \frac{1}{1 + sCR_2}$$

$$f_c = \frac{1}{2\pi R_2 C} = \frac{1}{2\pi \cdot 100 \cdot 10^3 \cdot 10 \cdot 10^{-9}} = \frac{1}{2\pi \cdot 10^{-3}} =$$

$$= \frac{1000}{6,28} \approx 160 \text{ Hz}$$

$$C \begin{matrix} 10 \mu\text{F} \\ 1 \text{ nF} \end{matrix} \quad \underline{1,6 \text{ kHz}}$$

$$0,1 \mu\text{F} = 100 \text{ pF} \quad 16 \text{ kHz}$$