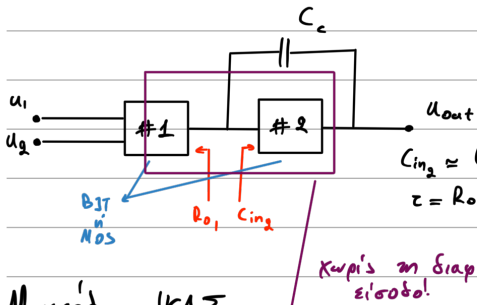
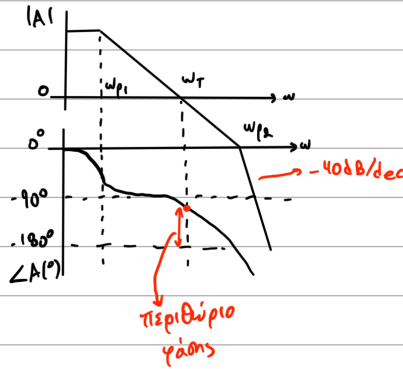
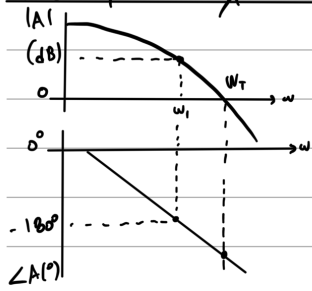


$$K = \frac{R_2}{R_1}$$

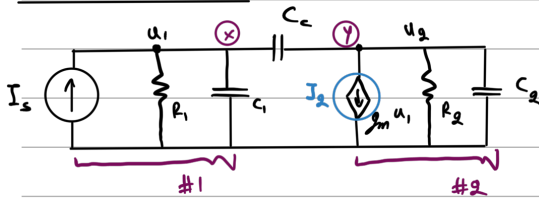
## Ανάλυση Θύλων Συχνότητας



$$C_{in2} \approx (A_{o2} + 1) C_c$$

$$\tau = R_{o1} \cdot C_{in2} \rightarrow \omega_{p1} = \frac{1}{R_{o1} \cdot C_{in2}} = \frac{1}{R_{o1} \cdot (A_{o2} + 1) C_c} \ll \omega_T$$

## Μοντέλο ΙΚΑΖ



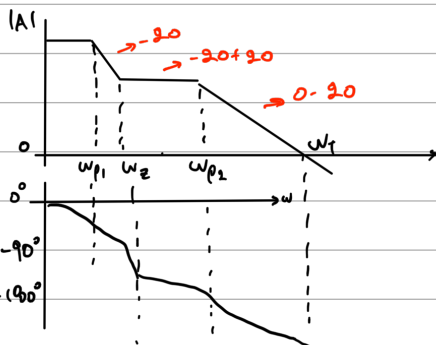
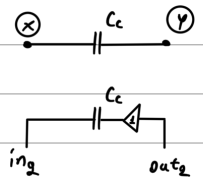
$$Y(s) = \begin{bmatrix} G_1 + s(C_1 + C_2) & -sC_c \\ -g_m s C_c & G_2 + s(C_1 + C_2) \end{bmatrix}$$

$$\begin{bmatrix} u_1 \\ u_2 \end{bmatrix} \begin{bmatrix} y \\ y \end{bmatrix} = \begin{bmatrix} -I_s \\ I_s \end{bmatrix}$$

$$\frac{V_2}{I_s} \rightarrow \frac{g_m - sC_c}{\Delta} \rightarrow \text{πόλοι}$$

$$\Delta \rightarrow \text{μηδενικά}$$

- $\omega_{p1} \approx \frac{1}{g_m R_1 R_2 C_c}$
- $\omega_{p2} = \frac{g_m C_c}{C_c(C_1 + C_2) + C_1 C_2}$
- $\omega_z = \frac{g_m}{C_c}$



$$\frac{V_2}{I_s} = \frac{g_m}{\Delta} \rightarrow \text{μνδ } \infty$$

