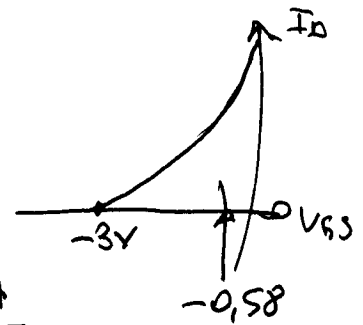
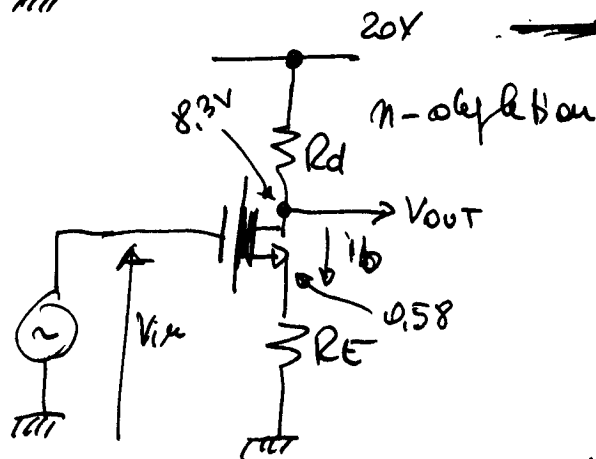
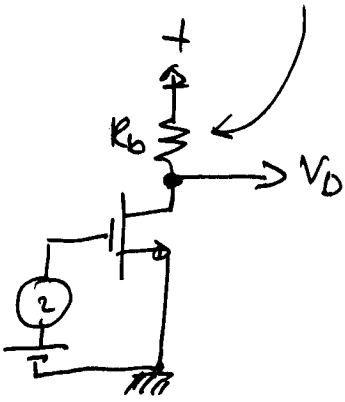


$$V_D = i_D \cdot R_D = g_m R_D \cdot V_{GS} \Rightarrow G = g_m R_D \quad \underline{P}$$



$$K = 0,2 \frac{\text{mA}}{\text{V}^2}$$

$$V_T = -3\text{V}$$

→ auto polarisation

$$I_D = 1,17 \text{ mA} \Rightarrow V_{GS} = -0,58 \text{ V} \Rightarrow R_E = 500 \Omega$$

regime di saturazione: $k(V_{GS} - V_{T2})^2 = 0,2 [-0,58 - (-3)]^2 = 1,17 \text{ mA}$

la dinamica $V_{GS} = 7,7 \text{ V} \Rightarrow V_D = 8,3 \text{ V}$

$$I_D = \frac{11,7 \text{ V}}{10 \text{ k}\Omega} = 1,17 \text{ mA}$$

$$g_m = 2\sqrt{k I_D} = 2[0,2 \cdot 1,17]^{1/2} = 0,97 \frac{\text{mA}}{\text{V}}$$