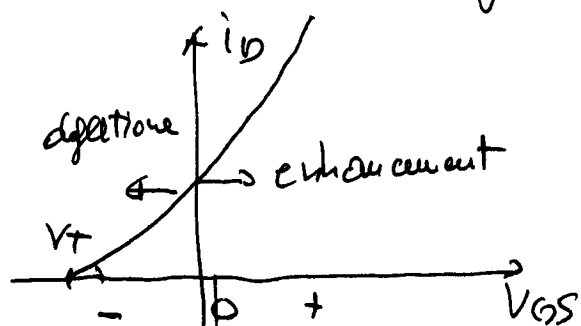


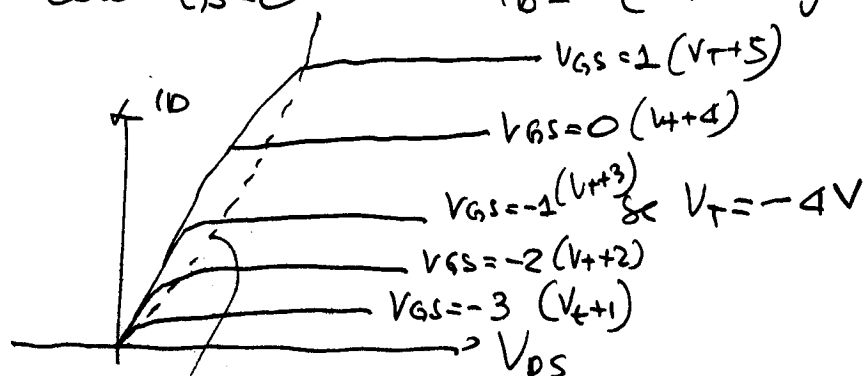
n-depletion



seul pour MOS de passage
fonctionne en depletion et
enhancement.

finir à 0,6 pour $\sqrt{I_{DSS}}$.

avec $V_{GS}=0$ $i_D = k(V_{GS} - V_T)^2 \Rightarrow I_{DSS} = kV_T^2$



$V_{DS} = V_{GS} - V_T$ zone limite TRIODE - SATURATION

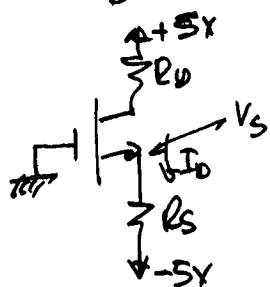
Exemple:

$I_D = 0.4 \text{ mA}$

$V_D = 1 \text{ V}$

$V_T = 2 \text{ V}$

$k = 0.4 \frac{\text{mA}}{\text{V}^2}$



en saturation:

$I_D = k(V_{GS} - V_T)^2$

$0.4 = 0.4(V_{GS} - 2)^2$

$V_{GS} = 3 \text{ V} \Rightarrow$ ~~saturation~~ ~~saturation~~

$\Rightarrow V_S = -3 \text{ V} \Rightarrow R_S = \frac{-2 \text{ V}}{0.4 \text{ mA}} = 5 \text{ k}\Omega$

$V_{DS} = 4 \text{ V} > (V_{GS} - 2)$
 $V_{GS} = 3 \text{ V}$

$\Rightarrow R_D = \frac{5 - 1}{0.4} = 10 \text{ k}\Omega$