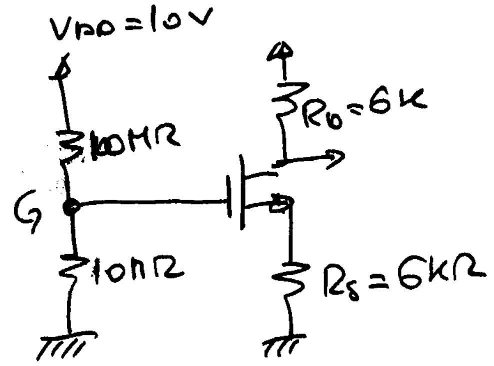


$V_t = 1V \qquad k = 0{,}5 \frac{mA}{V}$

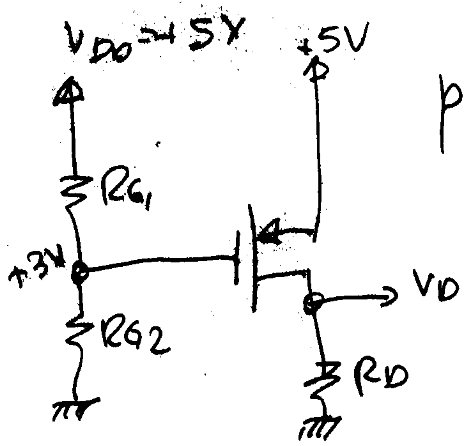
$V_G = 5V$

se $I_D = 0{,}5mA \Rightarrow V_S = +3V$

$\Rightarrow V_{GS} = 2V \Rightarrow V_D = 7V$

$V_{DS} = 4V > (V_{GS} - \underset{1V}{V_t})$

Zona di saturazione



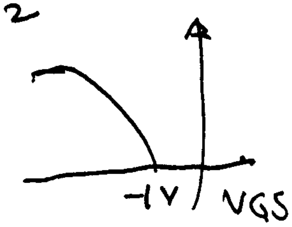
p-MOS

$I_D = 0{,}5mA$

$V_D = 3V$

$V_t = -1V$

$k = 0{,}5\ mA/V^2$



$$0{,}5 = 0{,}5\left[V_{GS} - (-1)^2\right]^2$$

$\Rightarrow V_{GS}$ deve essere negativo nei p-MOS

$V_{GS} = -2V \Rightarrow V_G = V_{DD} \cdot \frac{R_{G2}}{R_{G1} + R_{G2}}$

$\Rightarrow R_{G1} = 2M\Omega$ e $R_{G2} = 3M\Omega$

$\Rightarrow R_D = \frac{3V}{0{,}5mA} = 6k\Omega$