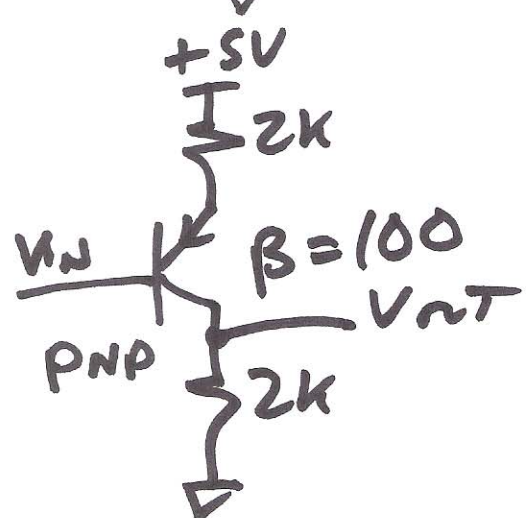
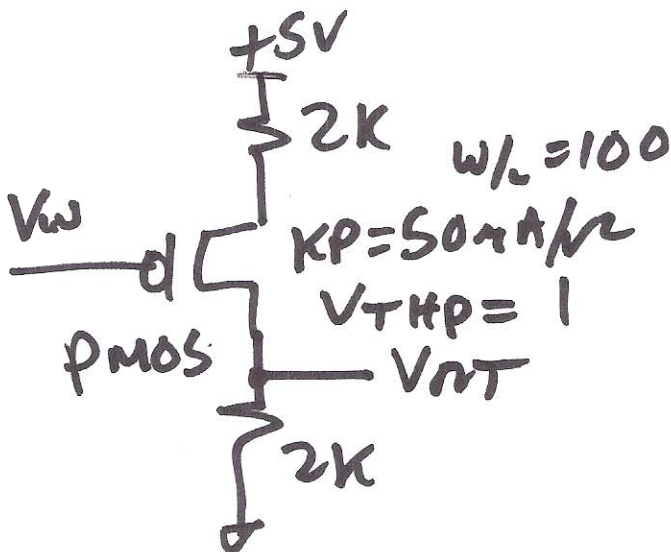
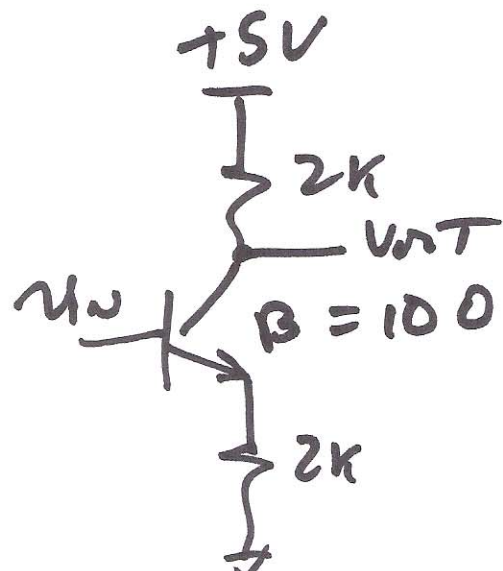
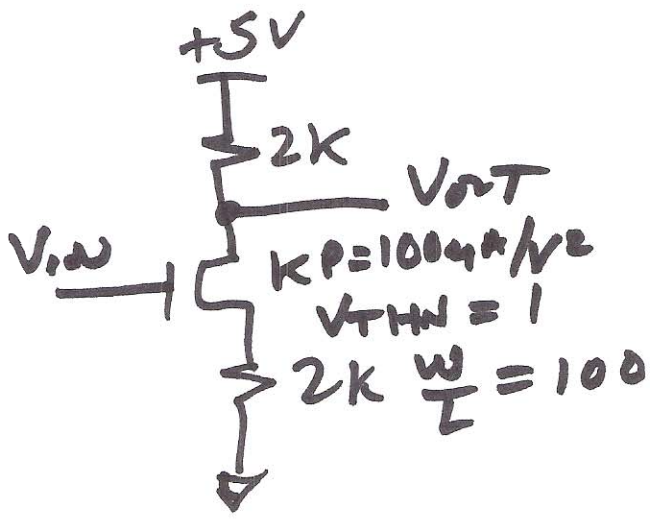
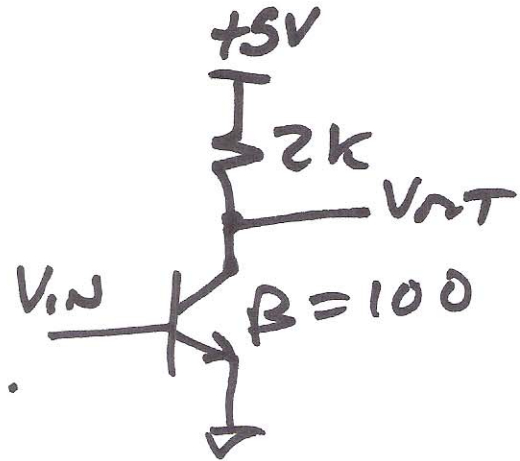
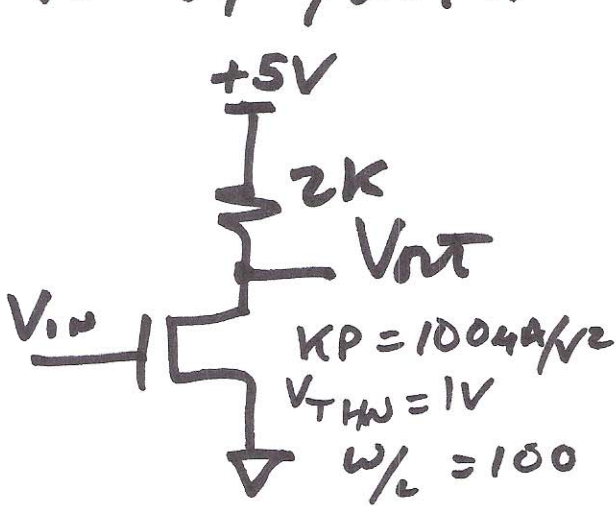
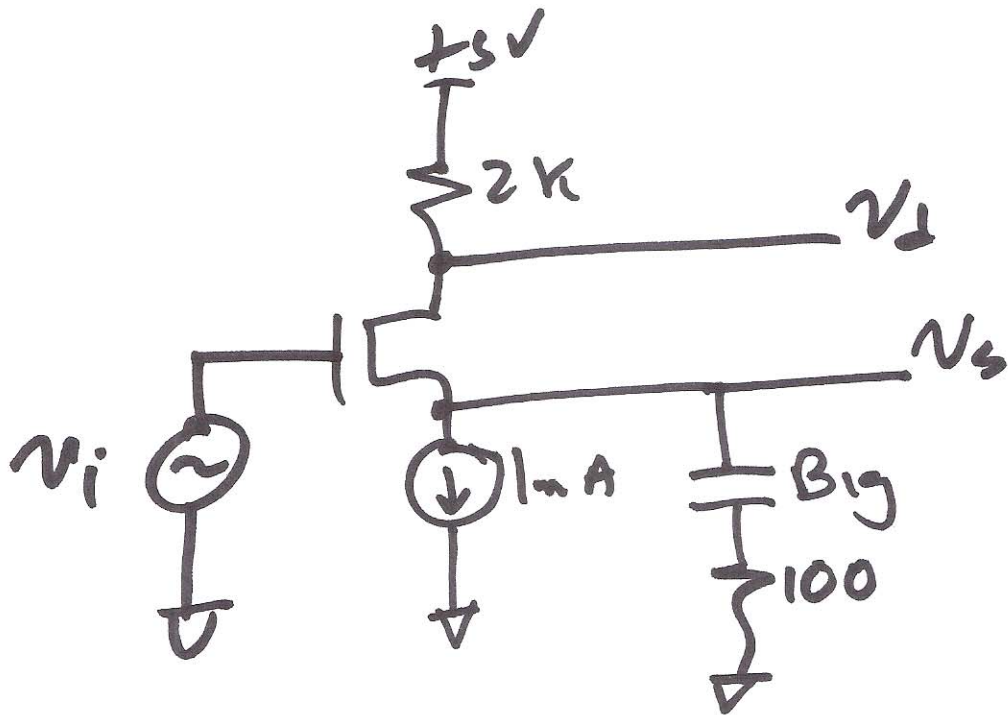
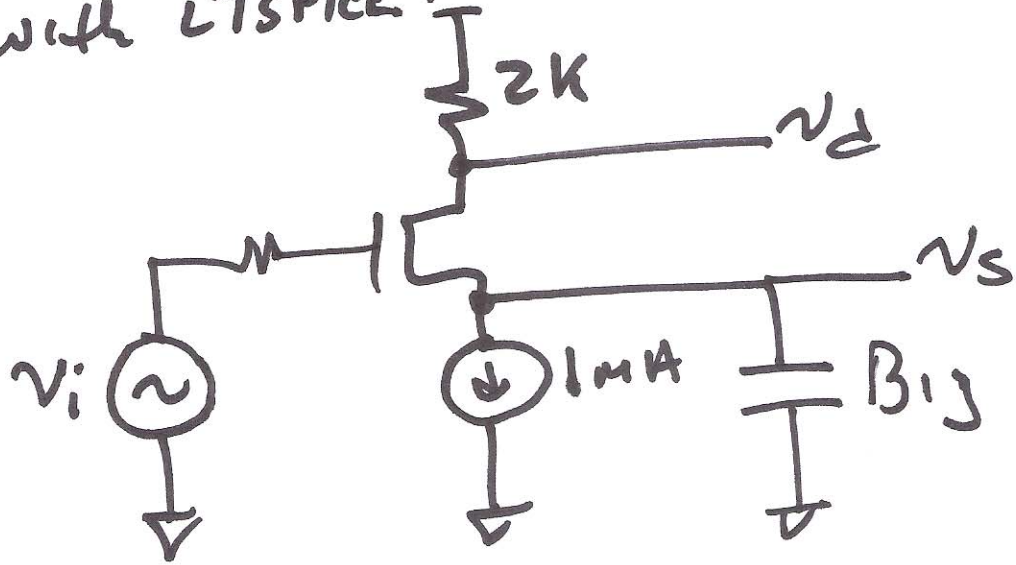


1) Sketch V_{out} v. V_{in} for the following. Verify your answers with LTSPICE.



2) Calculate All DC currents and voltages AND $\frac{v_d}{v_i}$ AND $\frac{v_s}{v_i}$ for the following. Assume $K_P = 100 \mu A/V^2$, $W/L = 100$, $V_{THN} = 1V$.

Verify with LTSPICE + 5V



3) Repeat 2 for the following.
 Assume $\beta = 100$. $\left(\frac{v_c}{v_i} \neq \left(\frac{v_e}{v_i}\right)\right)$

