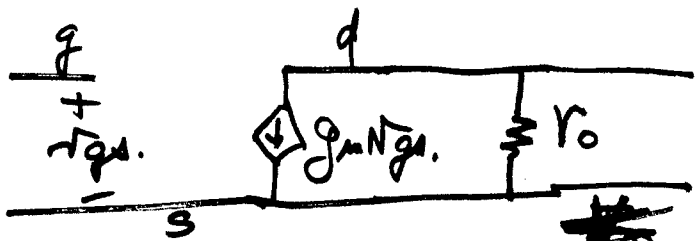
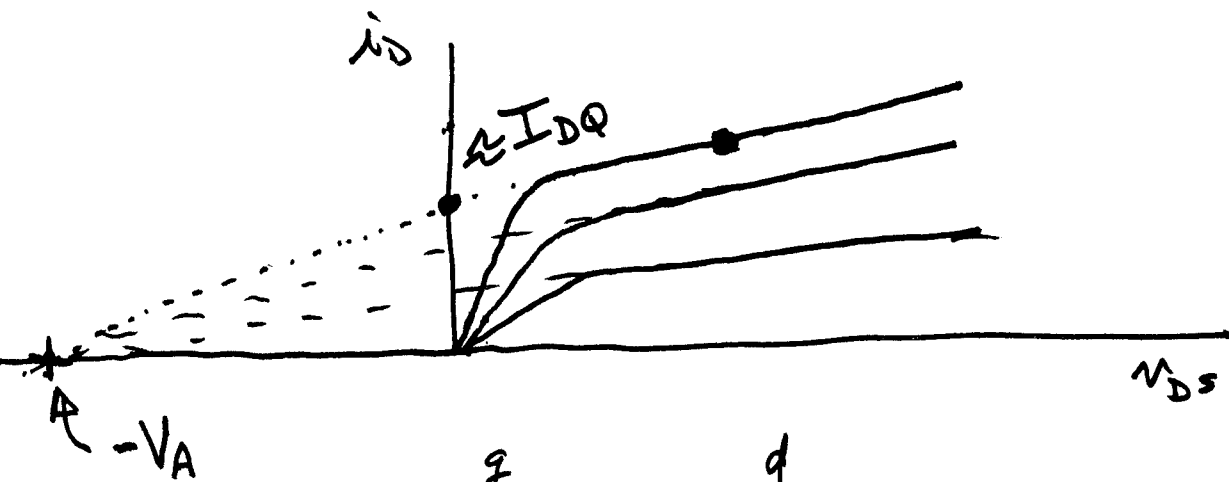
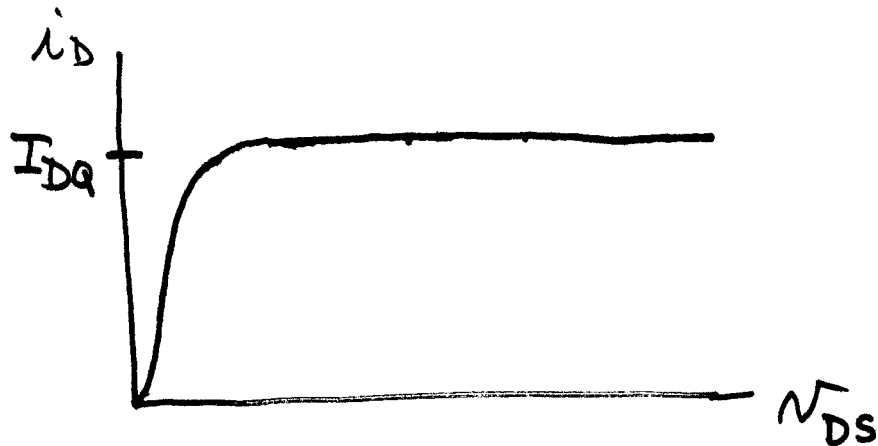
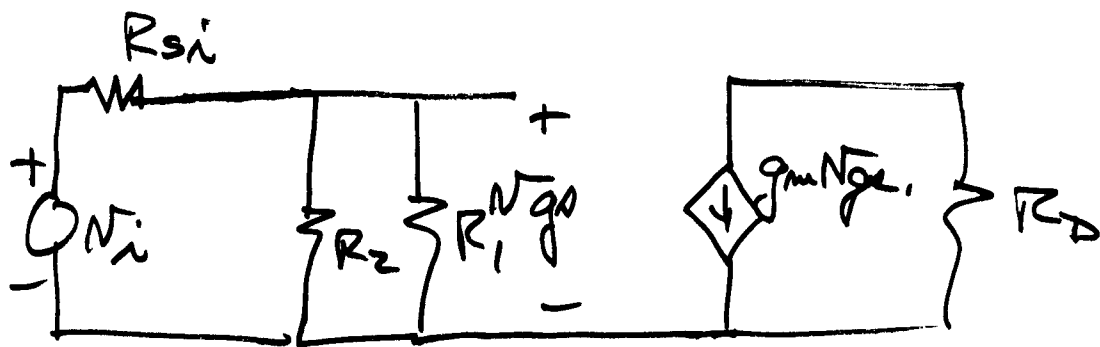
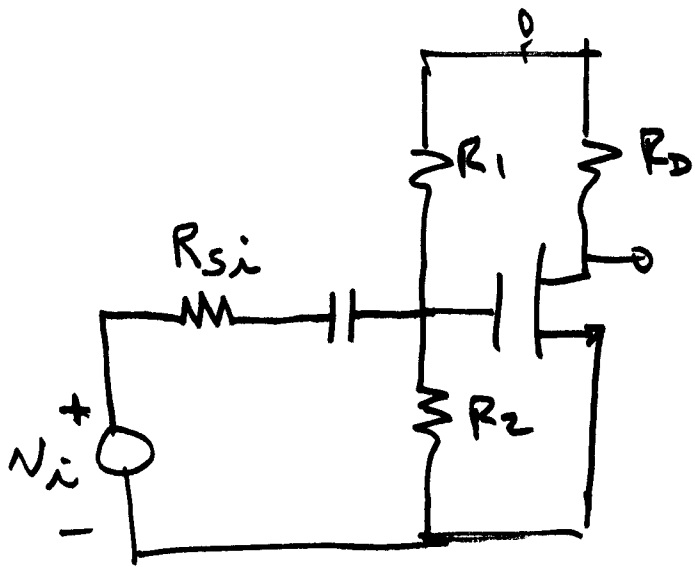
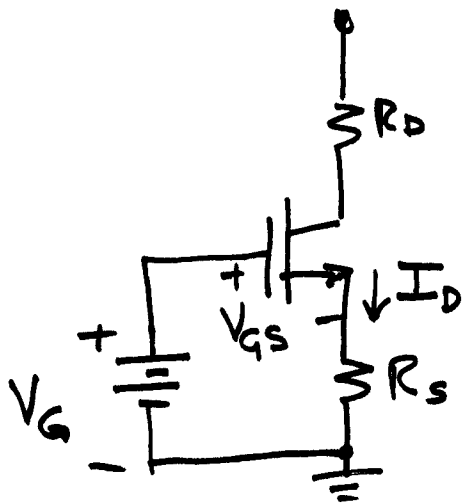


$$i_D = K_m (V_{gs} - V_{TN})^2 (1 + \lambda V_{DS})$$

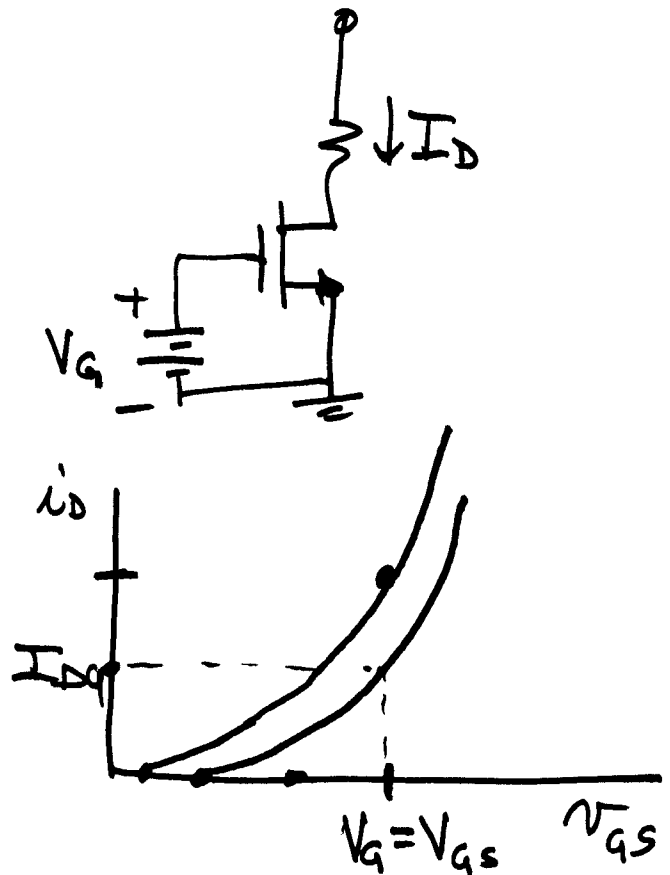
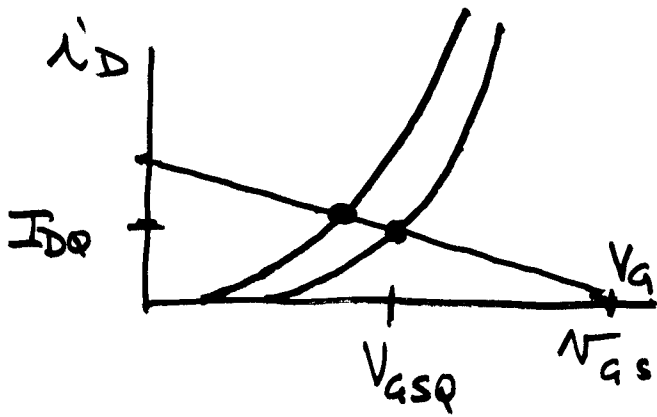


$$r_o = \frac{V_A}{I_{DQ}}$$





$$V_{GS} = V_G - I_D R_S$$



$$g_m = 2\sqrt{I_{DQ} K_n}$$

$\therefore R_S$ REDUCES THE VARIABILITY IN I_{DQ}

