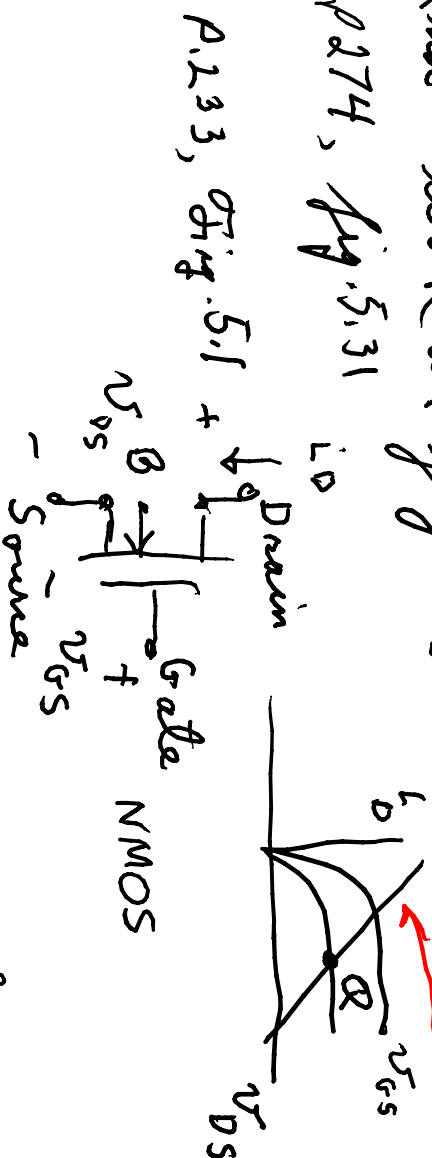
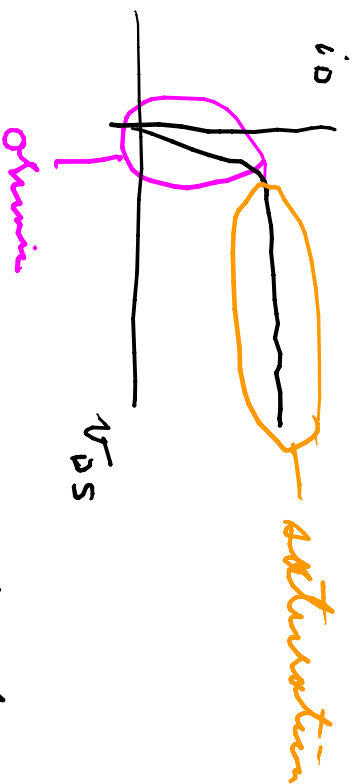


1st = get PS rise summing  
 2nd = look at figures in the book load line  
 p.274, fig. 5.31



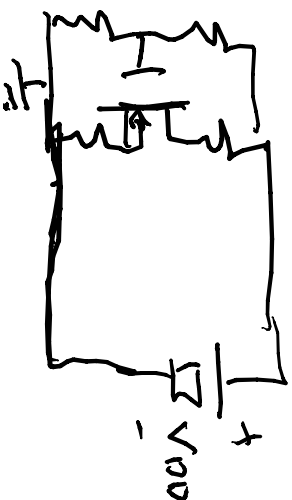
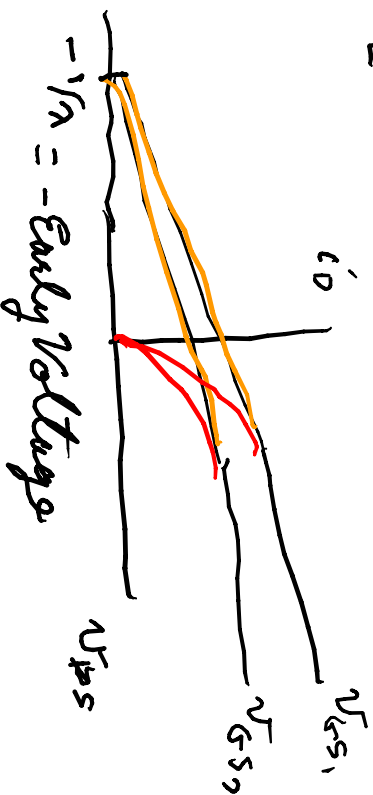
$$P.243, \text{ eq. (5.20)} \quad I_D = \frac{1}{2} k'_n \frac{W}{L} (V_{GS} - V_t)^2 \quad \text{for saturation operation}$$

$$P.241, \text{ eq. (5.16)} \quad I_D = k'_n \left( \frac{W}{L} \right) \left\{ (V_{GS} - V_t) V_{DS} - \frac{1}{2} V_{DS}^2 \right\} \quad \text{for triode region}$$

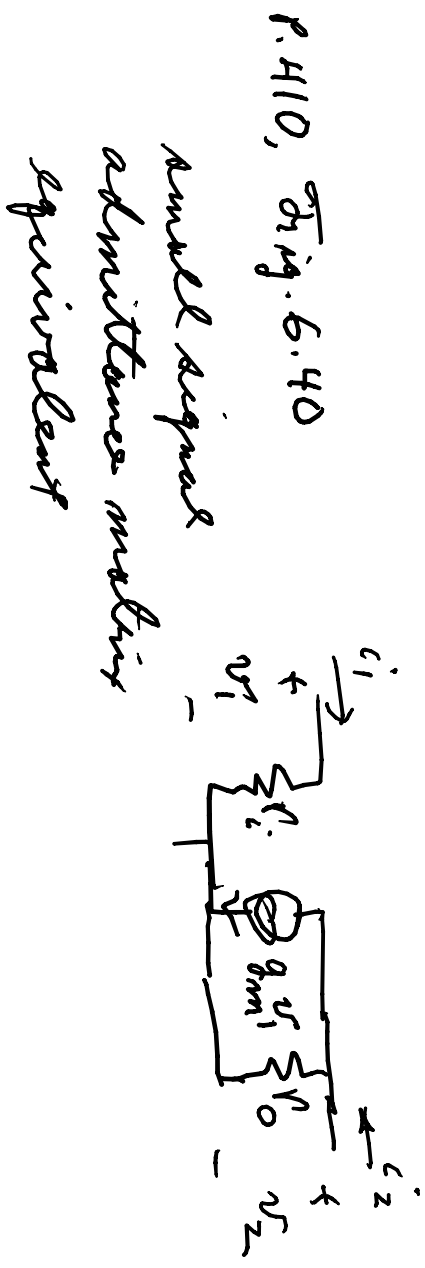
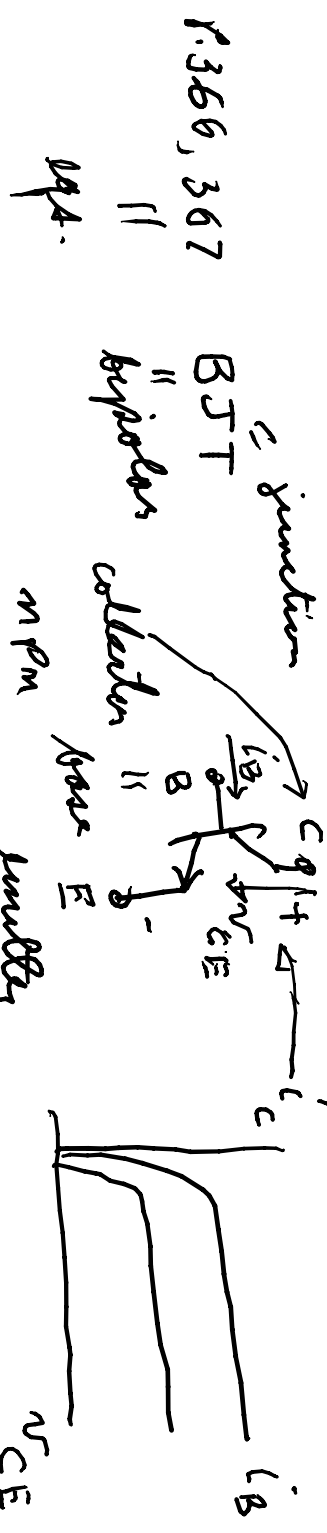


P. 254, eq. (5.23)

$$i_D = \frac{1}{2} \mu_n C_{ox} \frac{W}{L} (v_{GS} - V_{E})^2 (1 + \lambda v_{DS}) \quad \text{in saturation}$$



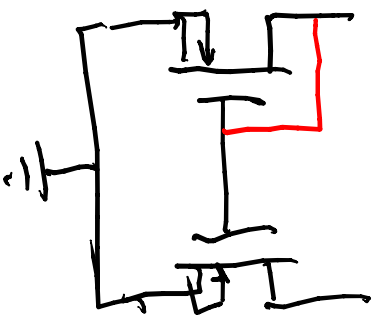
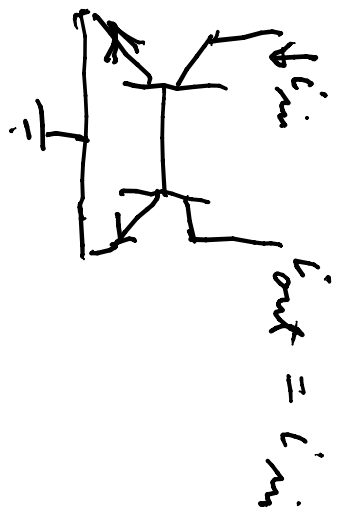
P. 308, Fig. 5.52 showing  
 (to point energy in



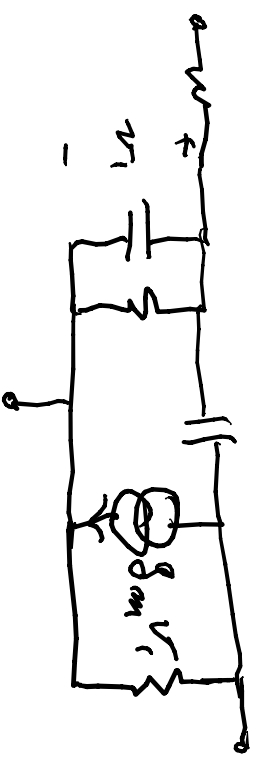
P. 452, Fig. 6.63 current mirrors  
m pm

P. 528, Fig. 7.23

current mirrors  
NMOS

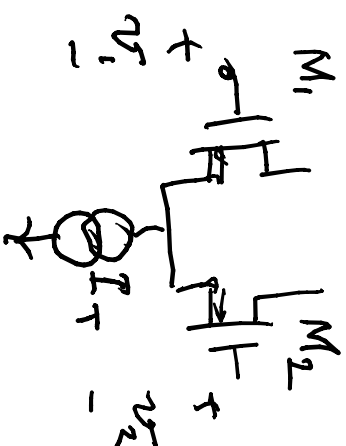


P. 558, Table 7.A.3



Hybrid π

P. 588, differential pair



P. 738, fig. 7.22 amplifiers  
equivalent for gain

P. 1133, inverters

P. 1153, pass transistor

P. 1114, fig 15.31, 2  $n_{os}$ , nand (CMOS)

r. 12.18, Trig. 15.12 SRAM  
r. 12.25, Trig. 15.18 DRAM