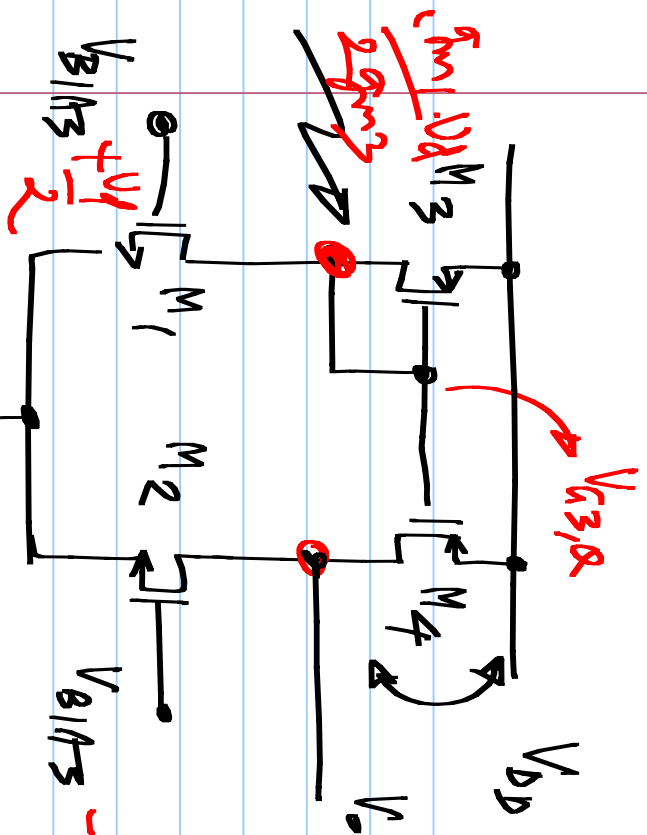
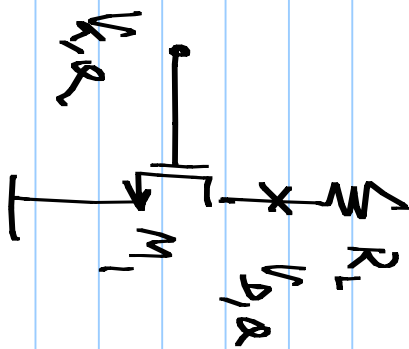
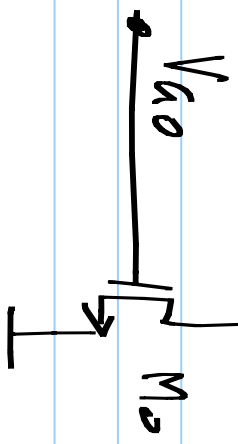




$$\frac{g_{m1} (r_{ds1} \parallel r_{ds2}) \cdot v_d}{2g_{m3}}$$

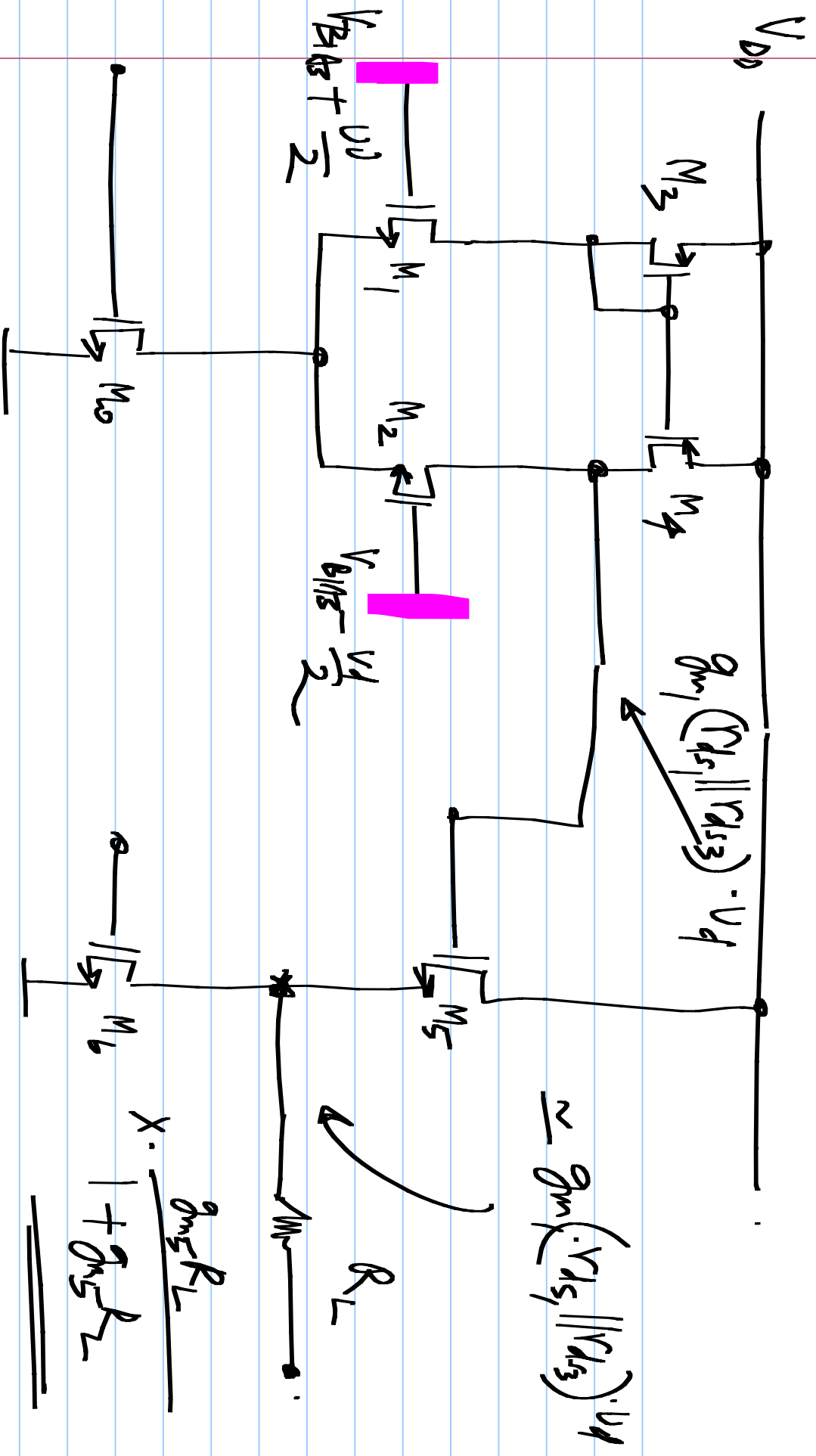
$$V_{B1/2} - \frac{V_d}{2} - V_T < V_O < V_{G3/2} - \frac{g_{m1}}{2g_{m3}} \cdot V_d + V_T$$

$$V_{D/2} + g_{m1} (r_{ds1} \parallel r_{ds2}) \cdot v_d$$

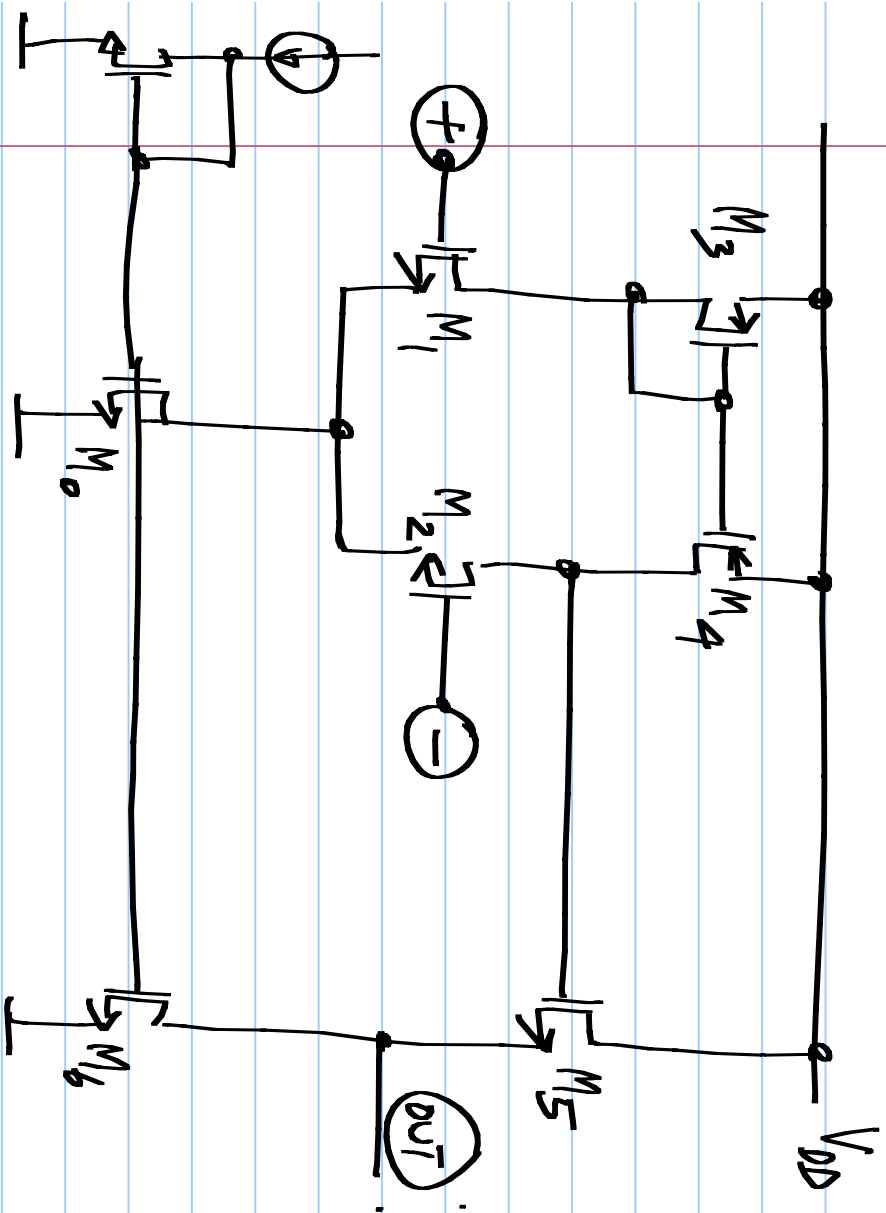


$$\frac{V_{D/2} - V_{G1/2} + V_T}{\cancel{g_{m1}} + \cancel{g_{m1}} \cdot R_L}$$

gain



Single stage opamp w/ buffer:



Ind. [gm, gds]
Determine:

Small signal v_o/v_i ,

v_o/v_{cm} , R_{out}

Range of V_{bias} ,

Range of V_{out}

