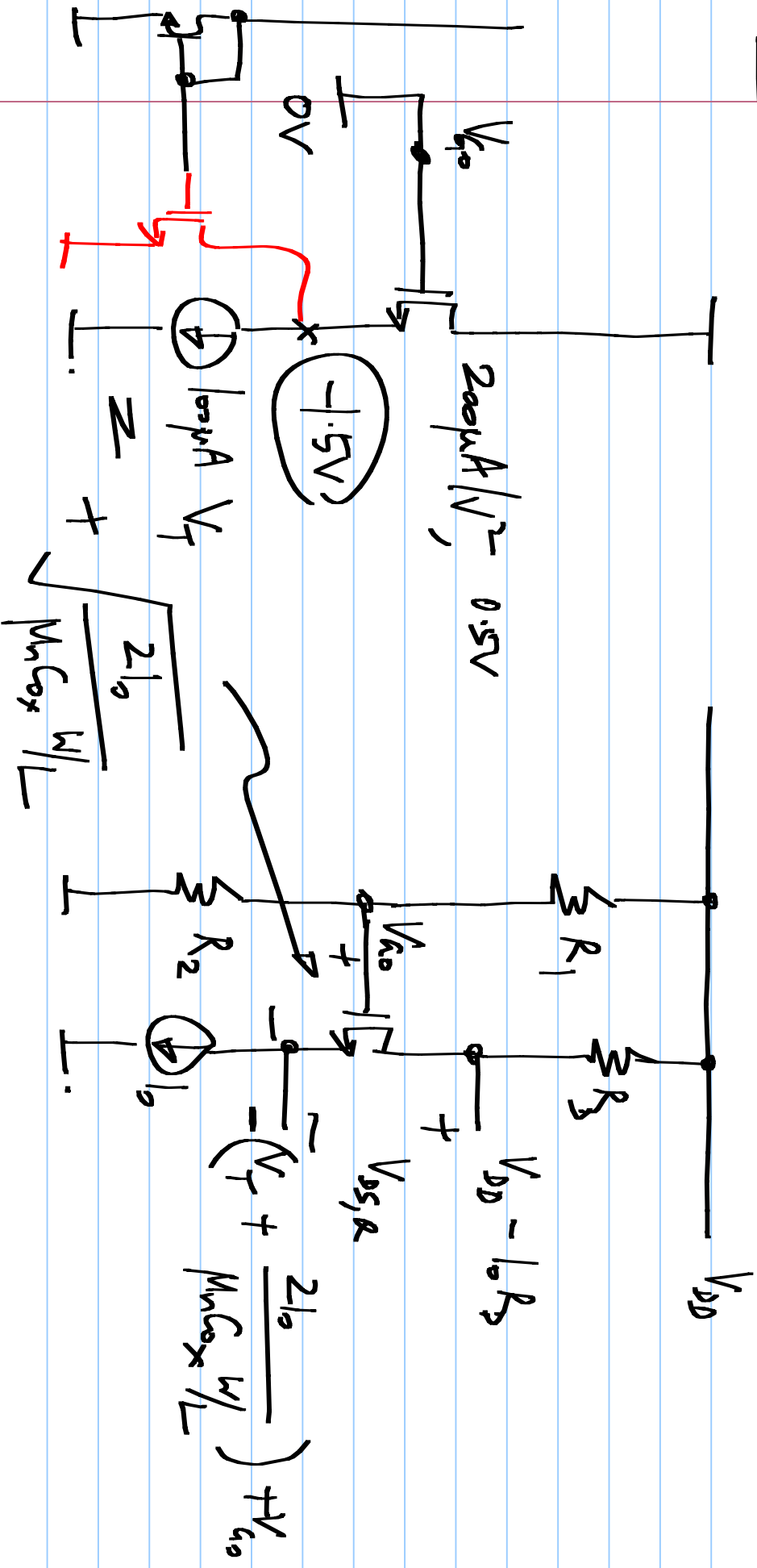
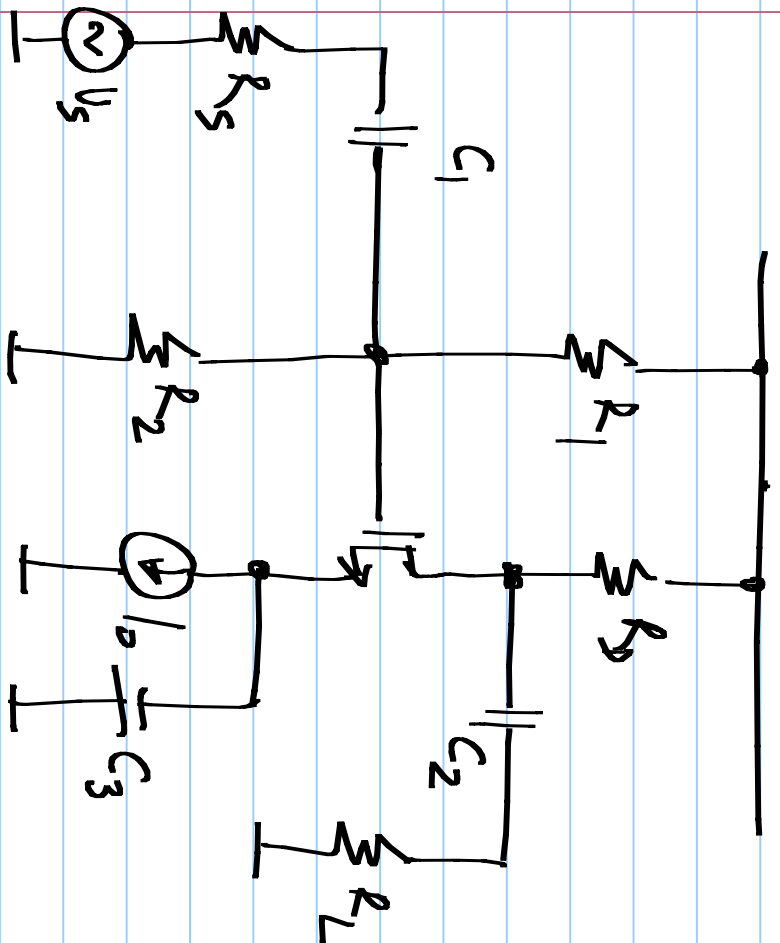


# Lecture 19



# Common source amplifier

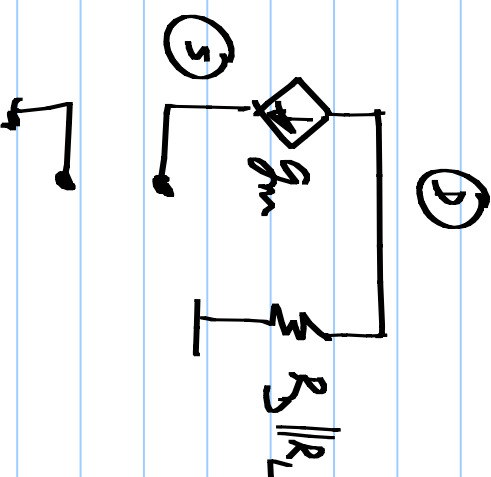
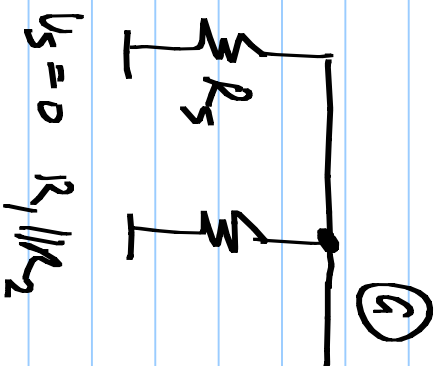


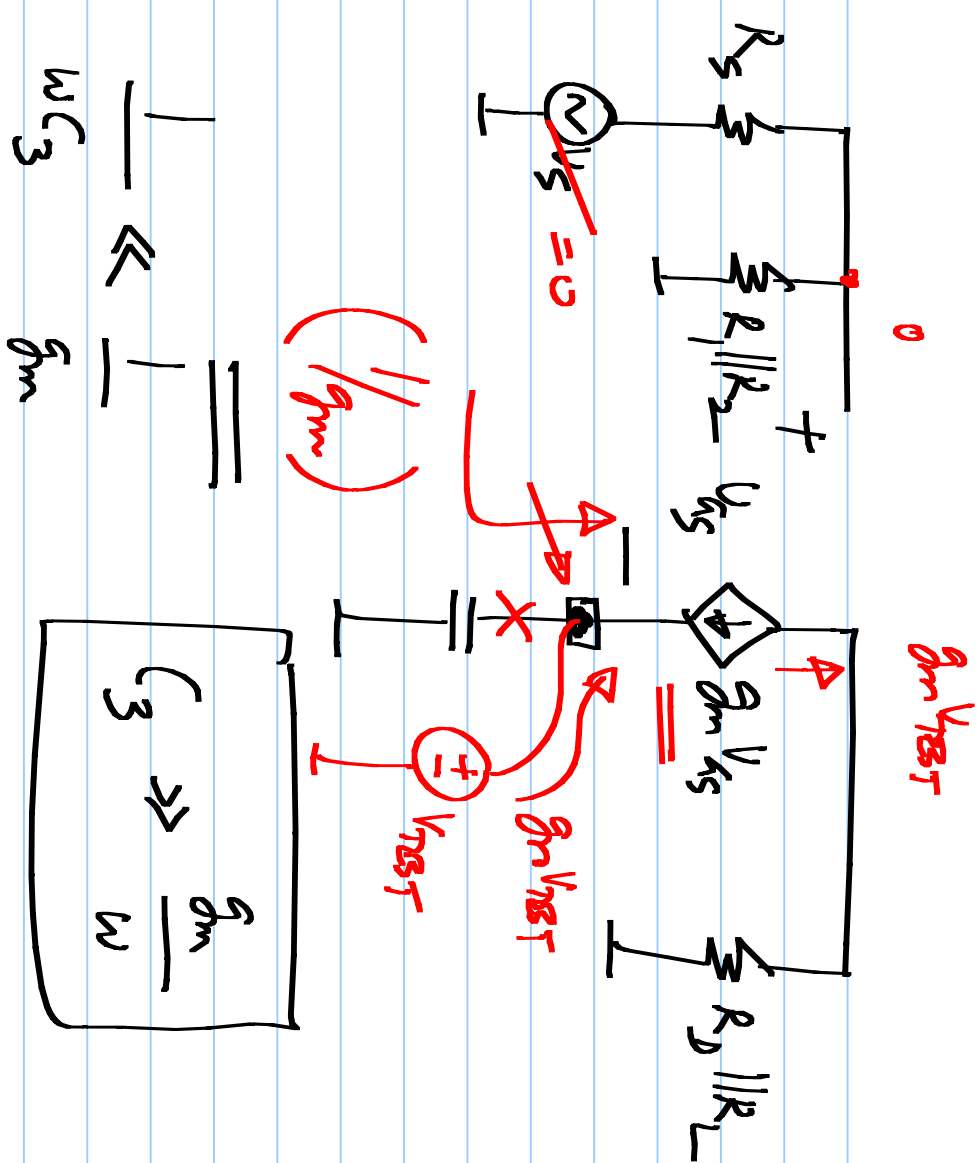
$$\omega C_1 \Rightarrow \frac{1}{R_s + (R_1 \parallel R_2)}$$

$$\omega C_2 \Rightarrow \frac{1}{R_3 + R_L}$$

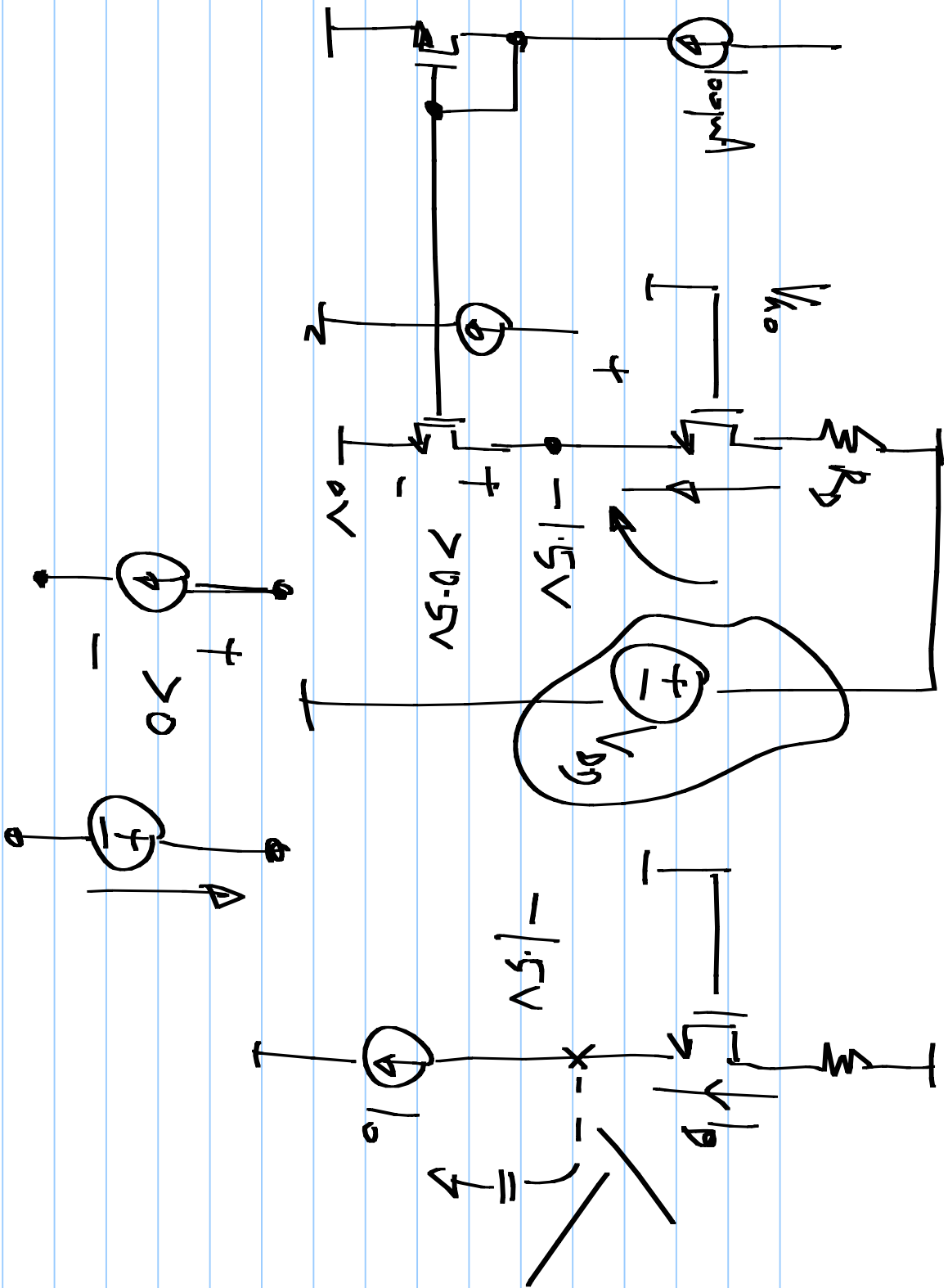
$$\omega C_3 \Rightarrow \frac{1}{R_L}$$

$$\omega C_3 \Rightarrow g_m$$





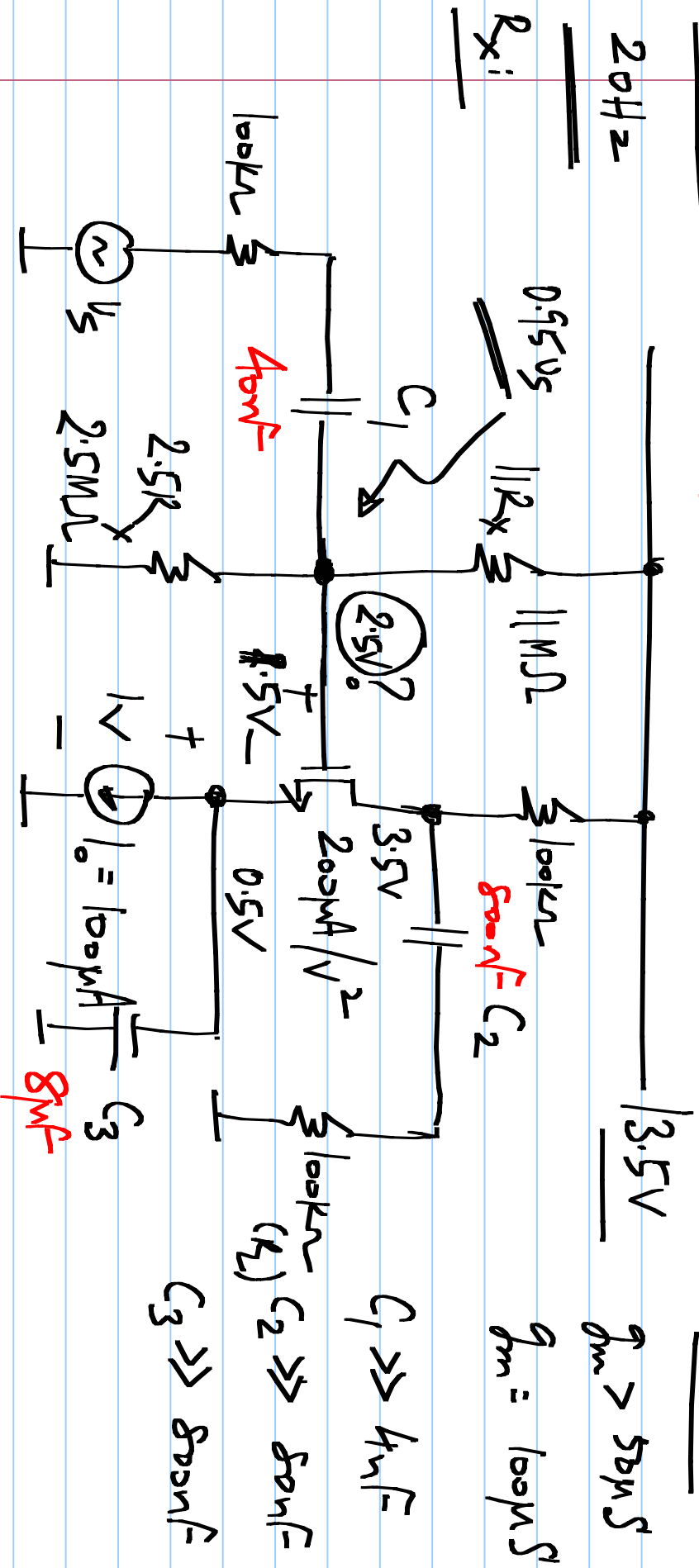
$$C_3 \gg \frac{\beta I_{B(S)}}{\omega}$$



$C_1, C_2, C_3:$

Calculate sving limits

gain: -5



$R_A = 932k\Omega$

