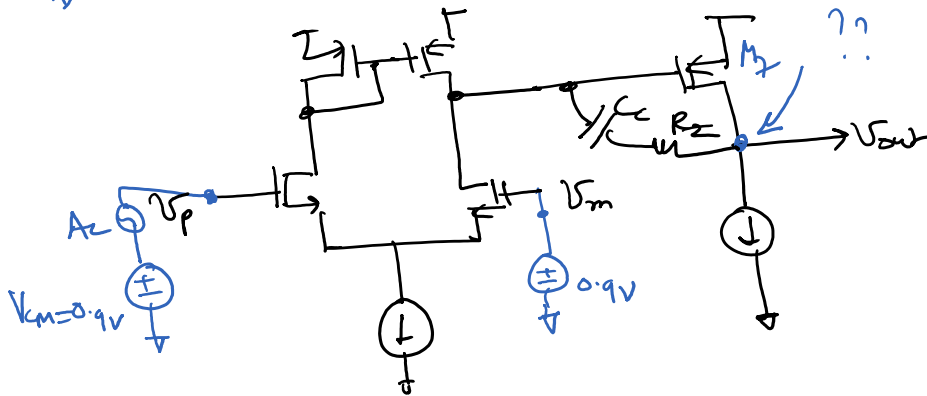


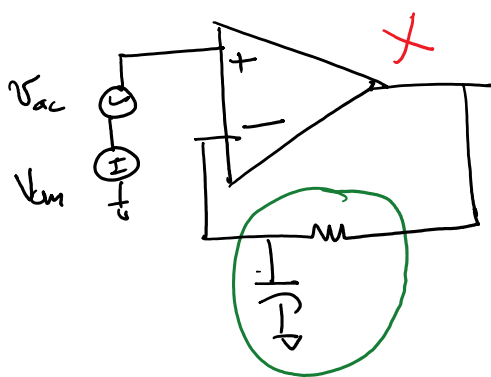
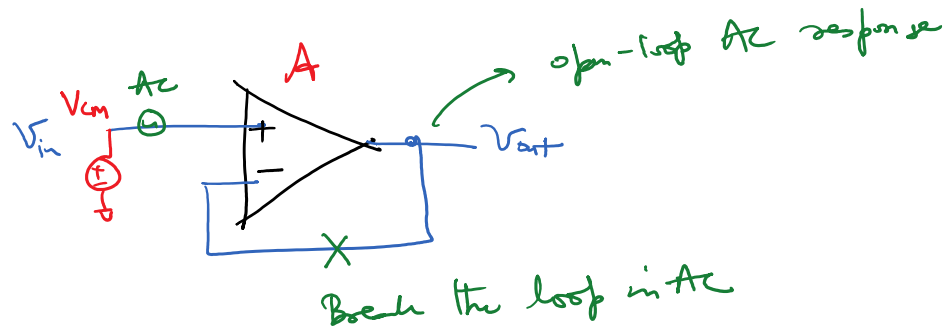
ECE SIS - Lecture 28

Tuesday, December 4, 2018 11:19 AM

$$V_{DD} = 1.8V$$



AC analysis



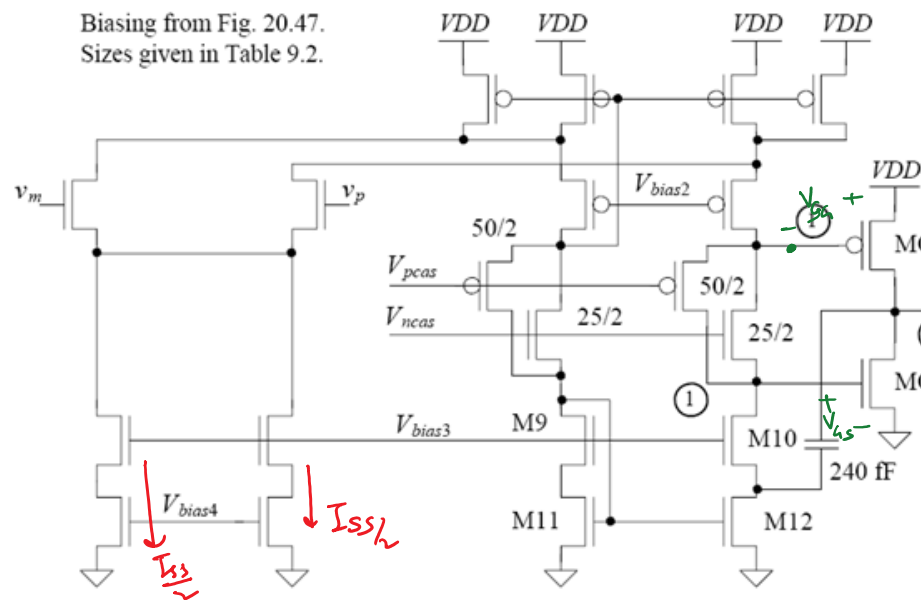
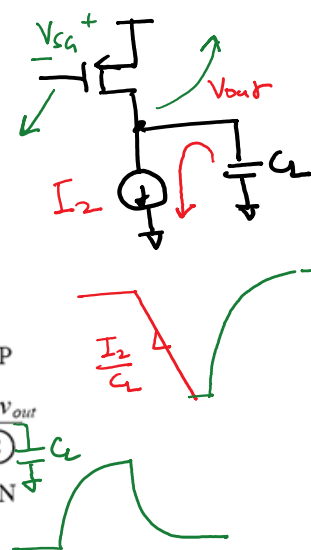
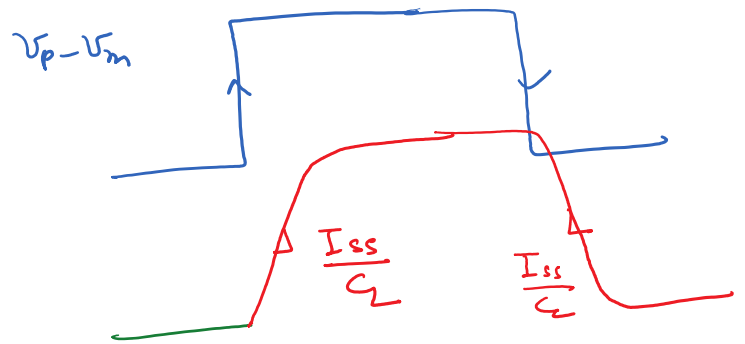
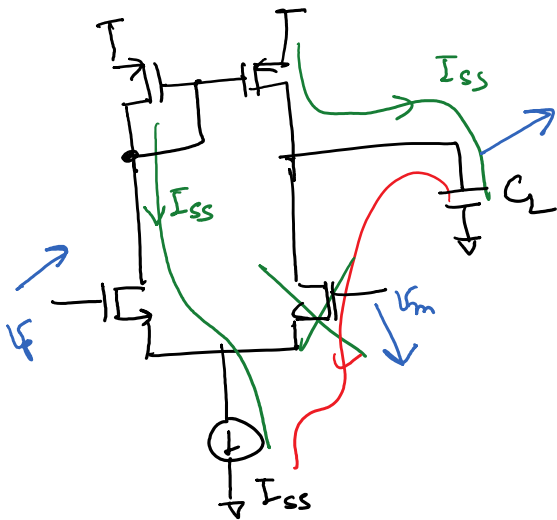
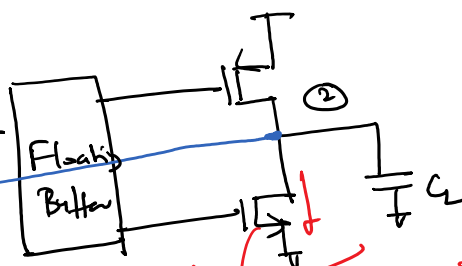
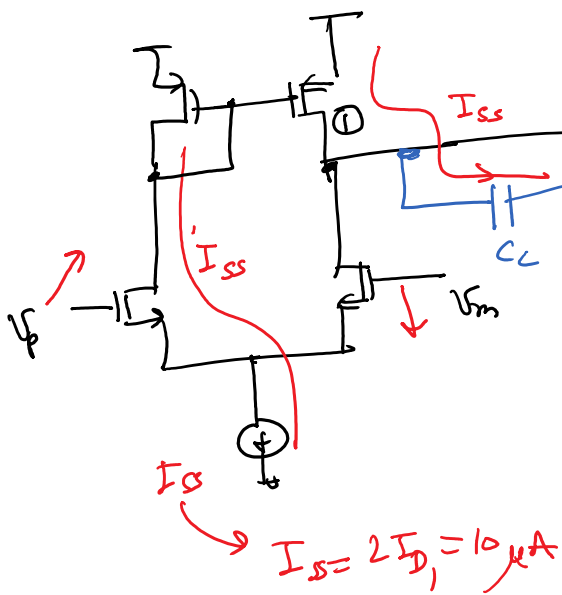


Figure 24.44 Folded-cascode op-amp with class AB output buffer.



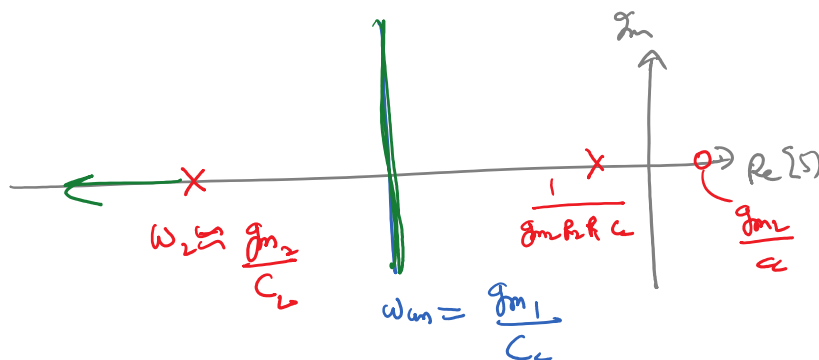


Overall slewing is due to $\frac{I_{SS}}{C_L}$



no slewing here
Class-AB Stage
 $I_{D2} = m I_{D1}$

$V_{DS} \rightarrow 5\% V_{DD}$
Same as fixing the current density $\frac{I_D}{W}$



$\therefore \rightarrow \omega_{un}$

$$\omega_2 \gg \omega_{\text{un}}$$

$$\frac{g_{m2}}{C_L} \rightarrow \frac{g_{m1}}{C_C}$$

$$\frac{g_{m2}}{g_{m1}} \Rightarrow \frac{C_L}{C_C}$$

$$C_L > 5 C_C$$

$$g_{m2} \gg g_{m1}$$

$$n > 2 \text{ or large}$$

$$\omega_2 \gg \omega_1$$

