

EE420 / ECL 620

April 29, 2015

Lecture 27

1:00 in TBA A-3(1)

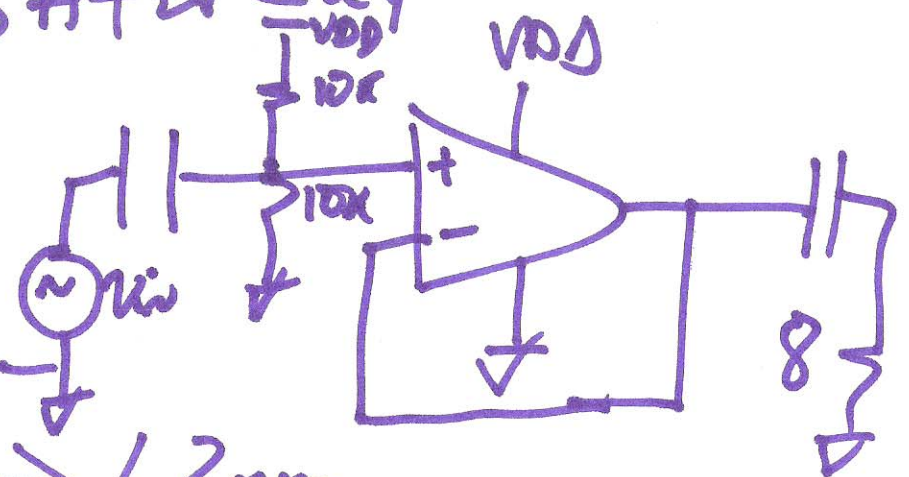
Saturday

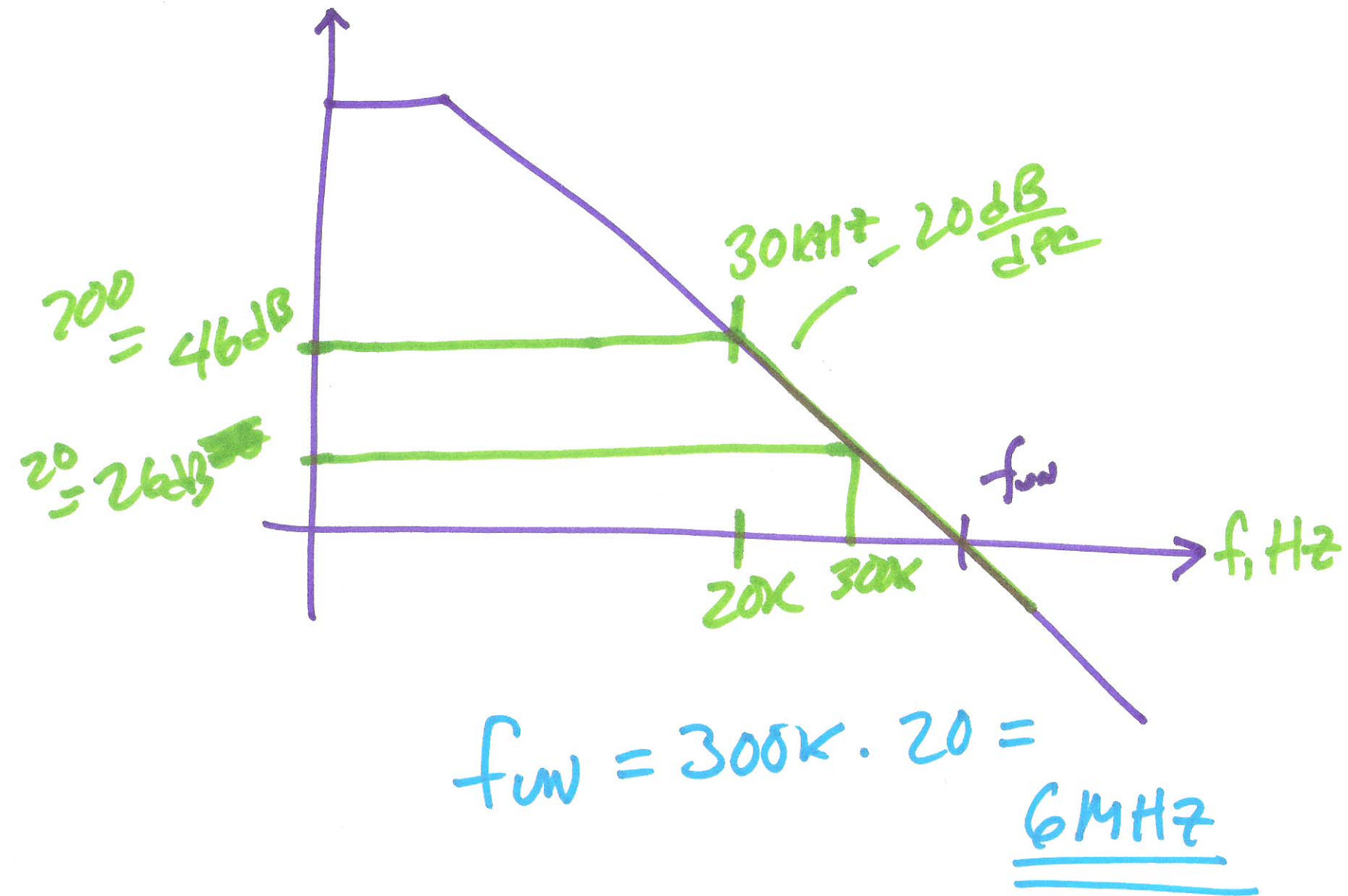
$$2 \leq L \leq 5$$

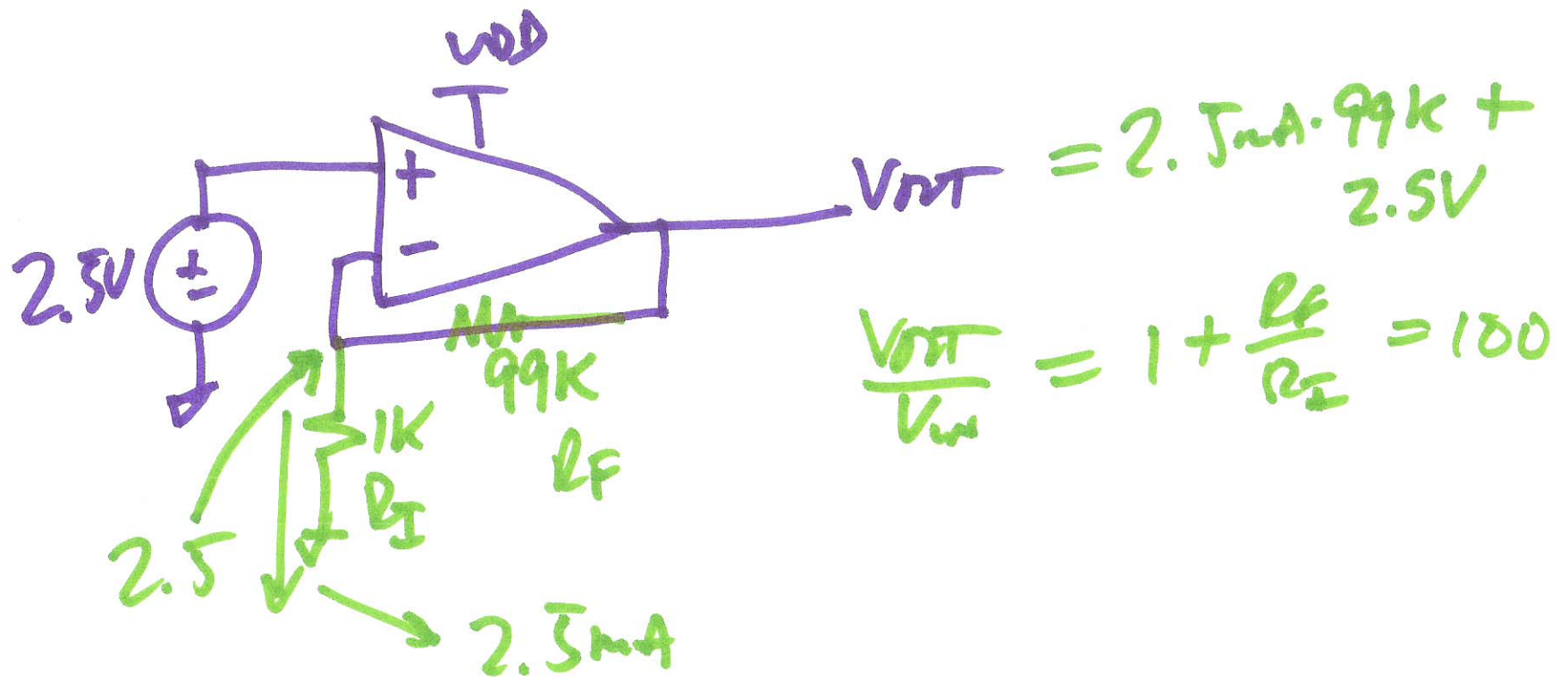
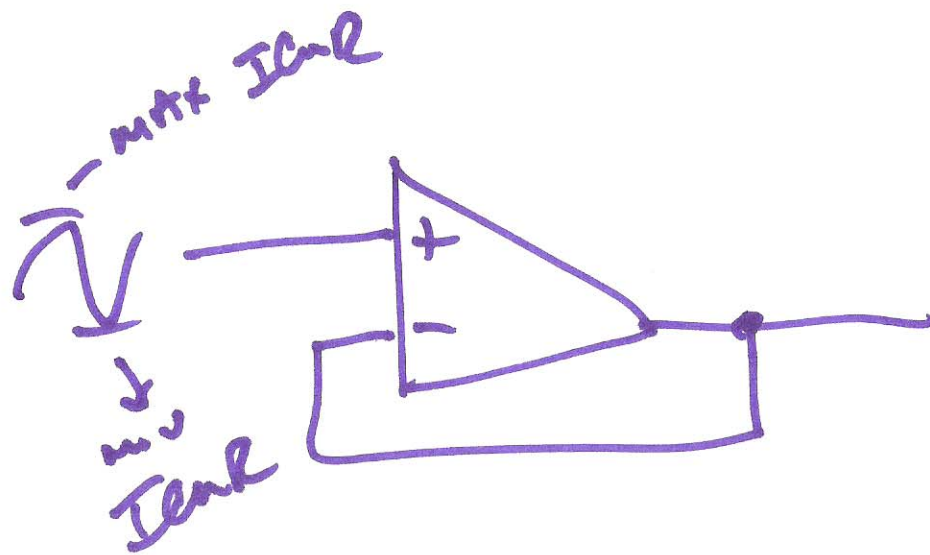
$$1.2 \mu m$$

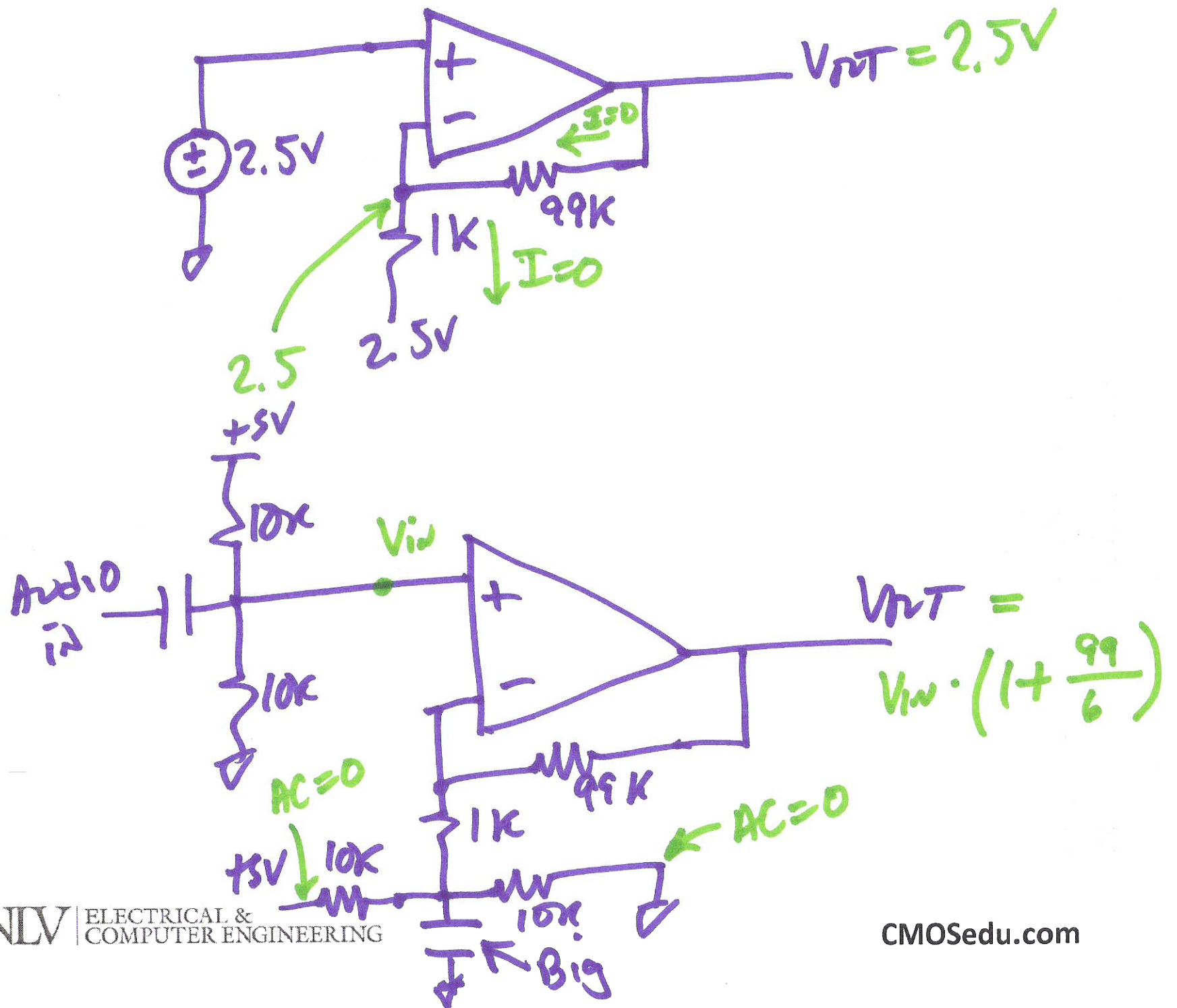
$$600 \mu m = 0.6 \mu m$$

$$L = 2 \Rightarrow 1.2 \mu m$$

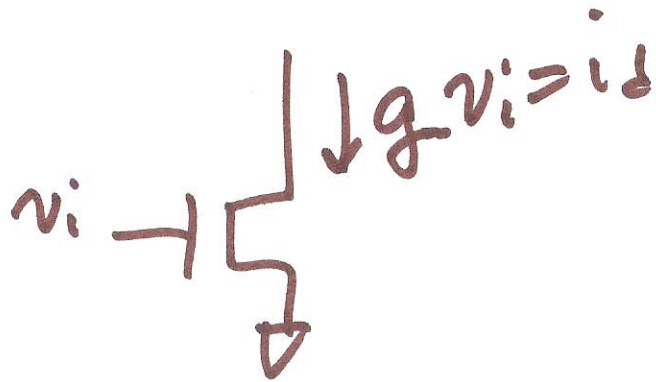




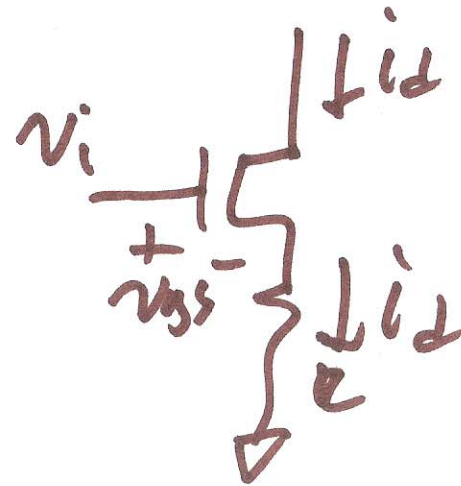




4)



$$G_m = \frac{1}{\frac{1}{g_m} + R}$$



$$\begin{aligned} v_i &= v_{gs} + i_d \cdot R \\ &= i_d \left(\frac{1}{g_m} + R \right) \end{aligned}$$

$$i_d = \frac{v_i}{\frac{1}{g_m} + R} = G_m(v_i)$$

