

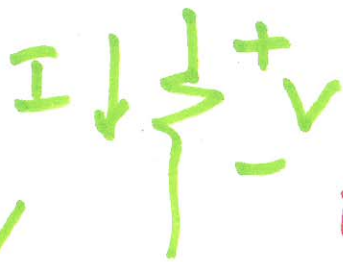
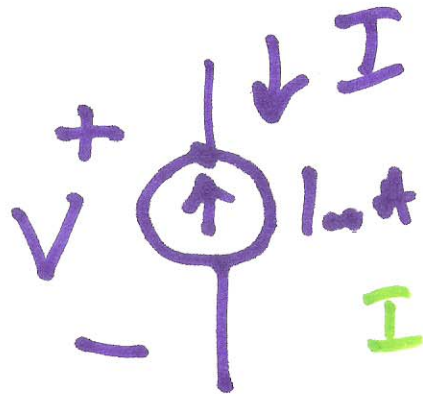
EE 420 / ECG 620

Analog IC Design

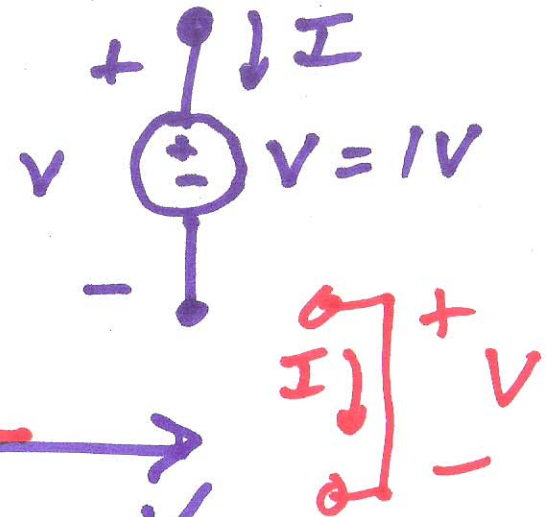
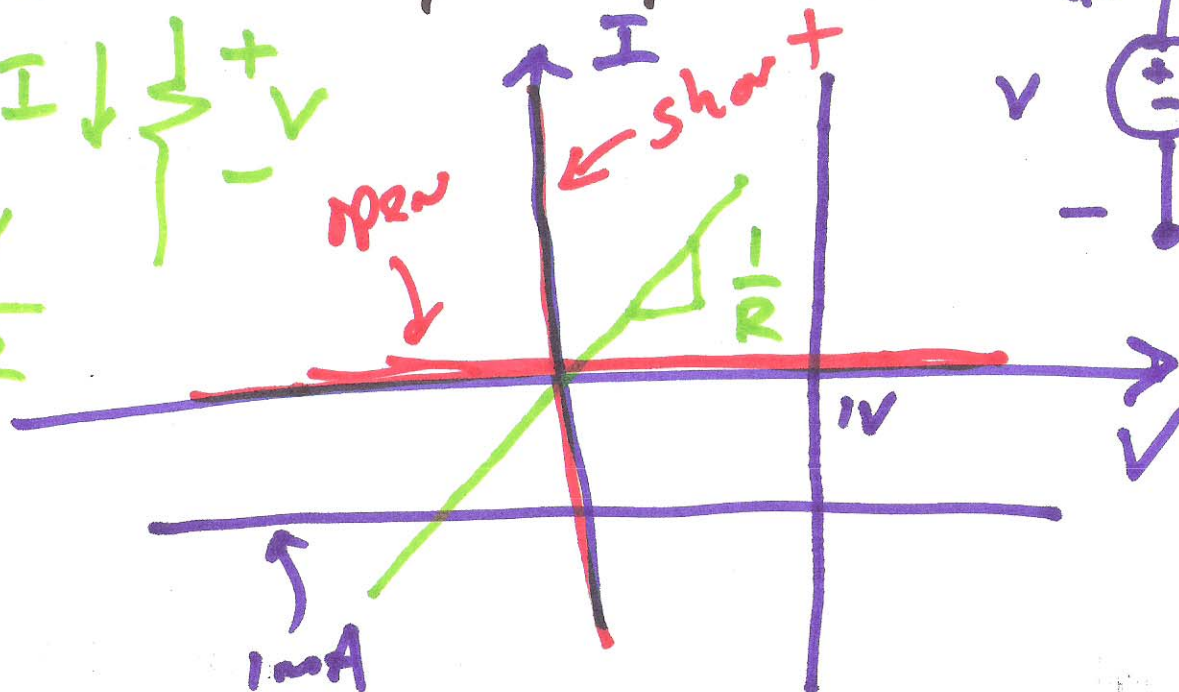
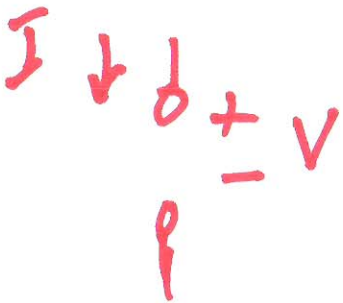
Lecture 1

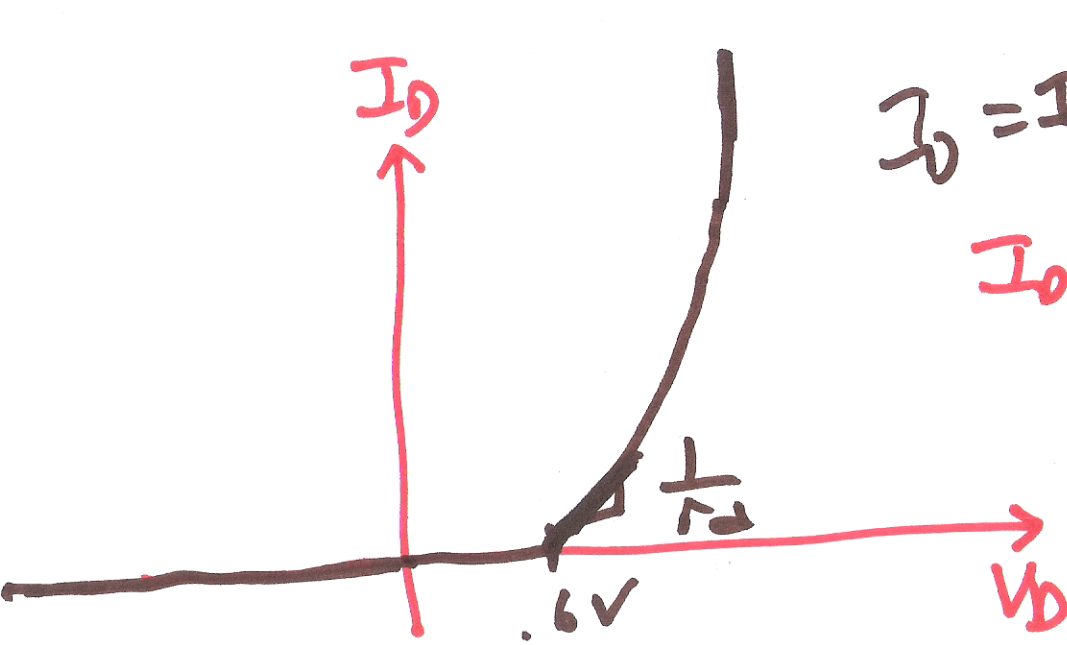
1/21/2015

$$y = mx + b$$



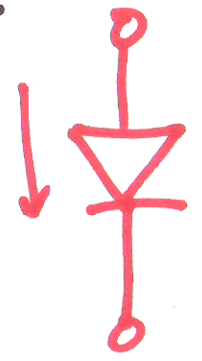
$$I = \frac{V}{R}$$



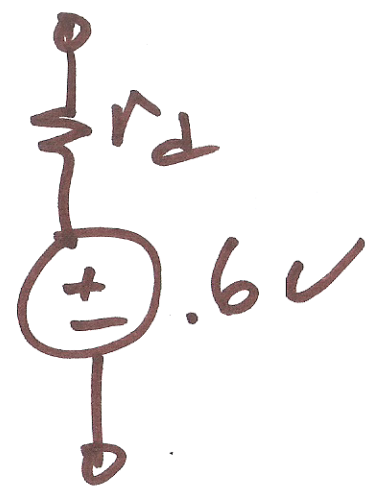


$$I_D = I_S (e^{V_D / nV_T} - 1)$$

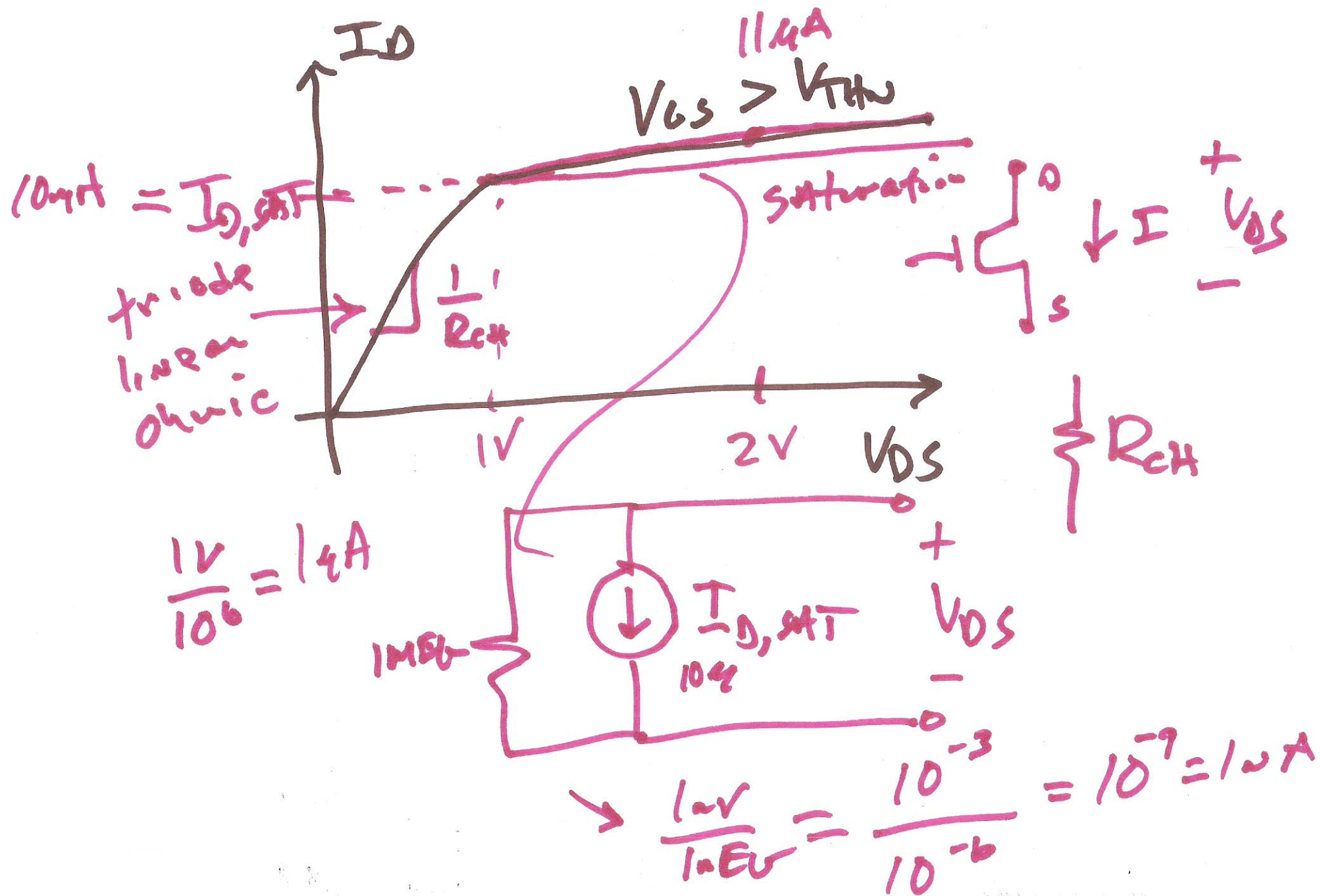
$$I_D = I$$



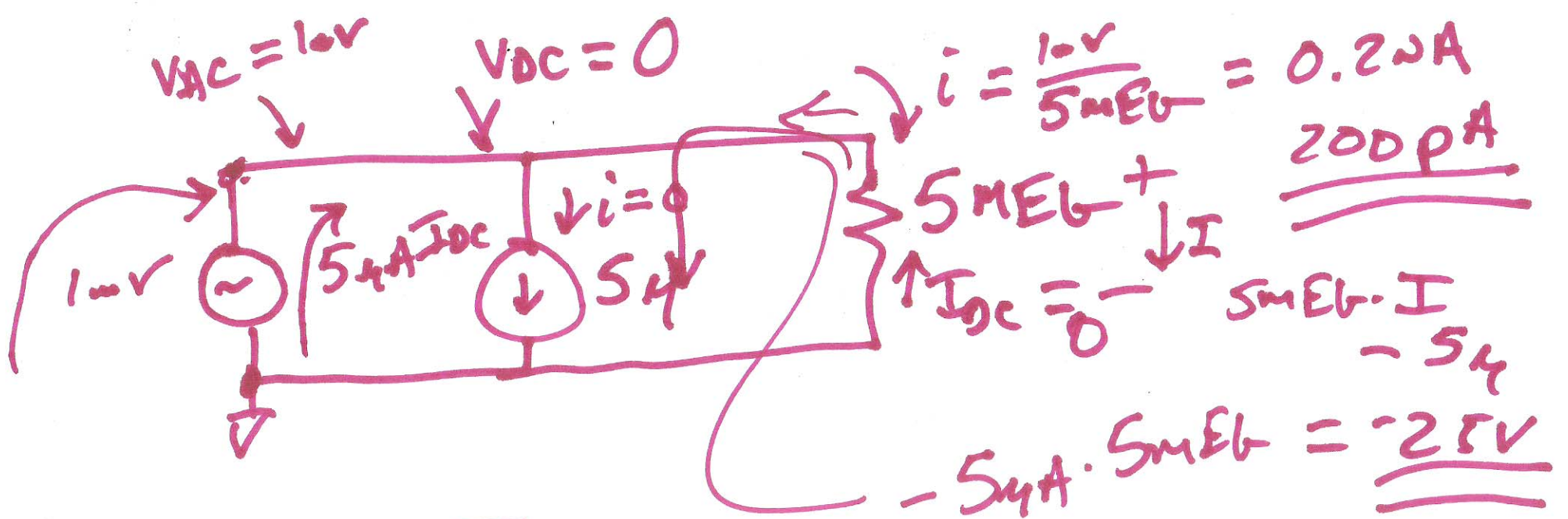
$$+ V = V_D -$$



2)



3)



$I \uparrow R \begin{matrix} + \\ - \end{matrix}$
 $I \downarrow R \begin{matrix} + \\ - \end{matrix} V = RI$
 $V = R(-I)$

