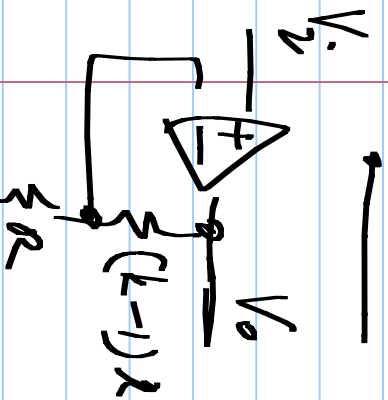
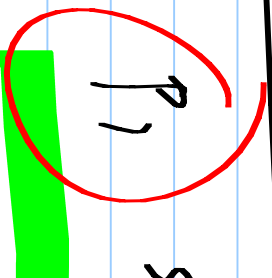


EE 2019

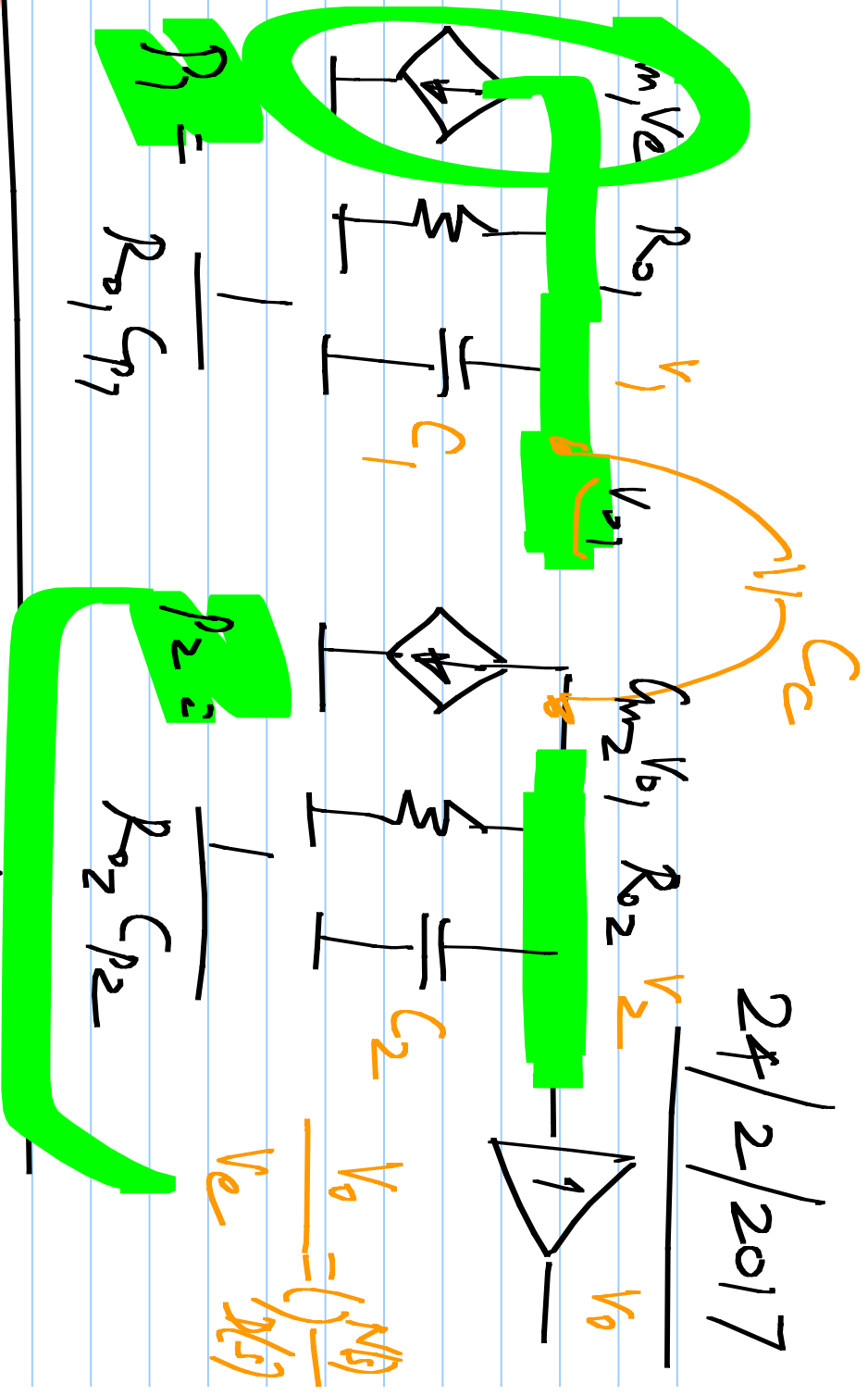


Lower



such that  $\omega_{\text{loop}} = \frac{A_0}{k} \cdot P_1 < P_2$

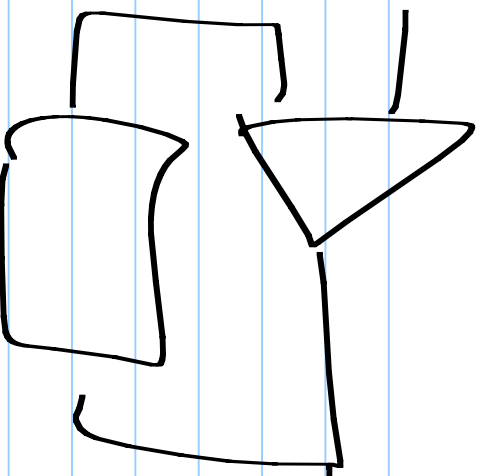
24/2/2017



$$P_1 = \frac{1}{R_{o1} C_1}$$

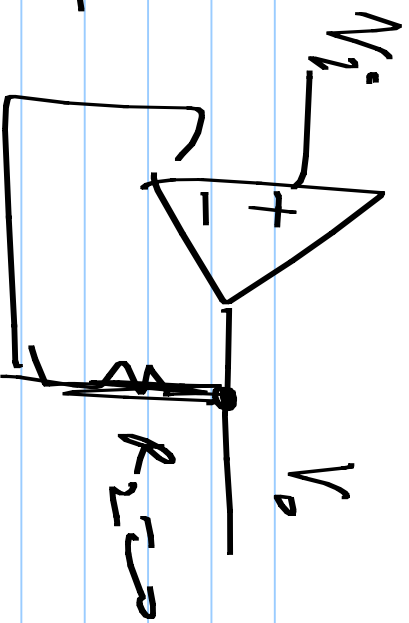
$$P_2 = \frac{1}{R_{o2} C_2}$$

$$V_0 = \left( \frac{A_0}{k} \right) V_e$$



OPA656  
OPA657

Unity gain compensated



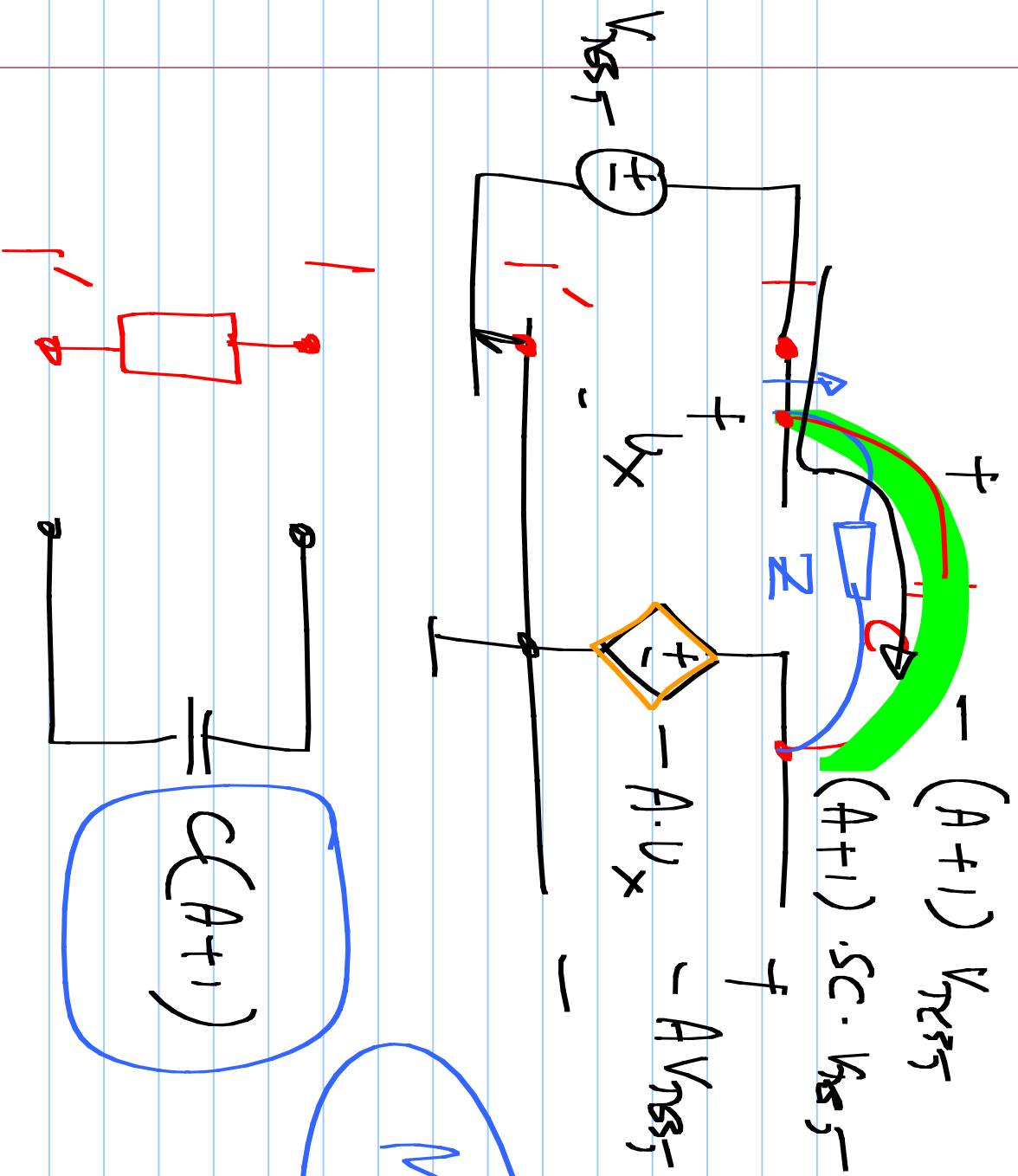
$$A_0 \cdot p_1 < p_2$$

~~k~~

$$\frac{V_o}{V_i} < 1000$$

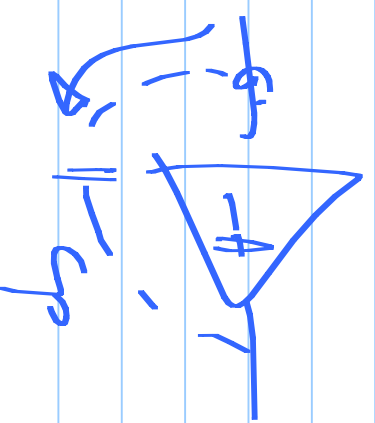
Compensated

$$f_b \cdot k \gg 20$$



$$C(A+1)$$

Miller effect



$$\left\{ \begin{bmatrix} 1 \\ 0 \end{bmatrix} V_1(s) \right\} = \begin{bmatrix} -G_m V_e \\ 0 \end{bmatrix}$$

$$N(s)$$

$$V_2(s)$$

$$= A_0$$

$$D(s)$$

$$V_e(s)$$