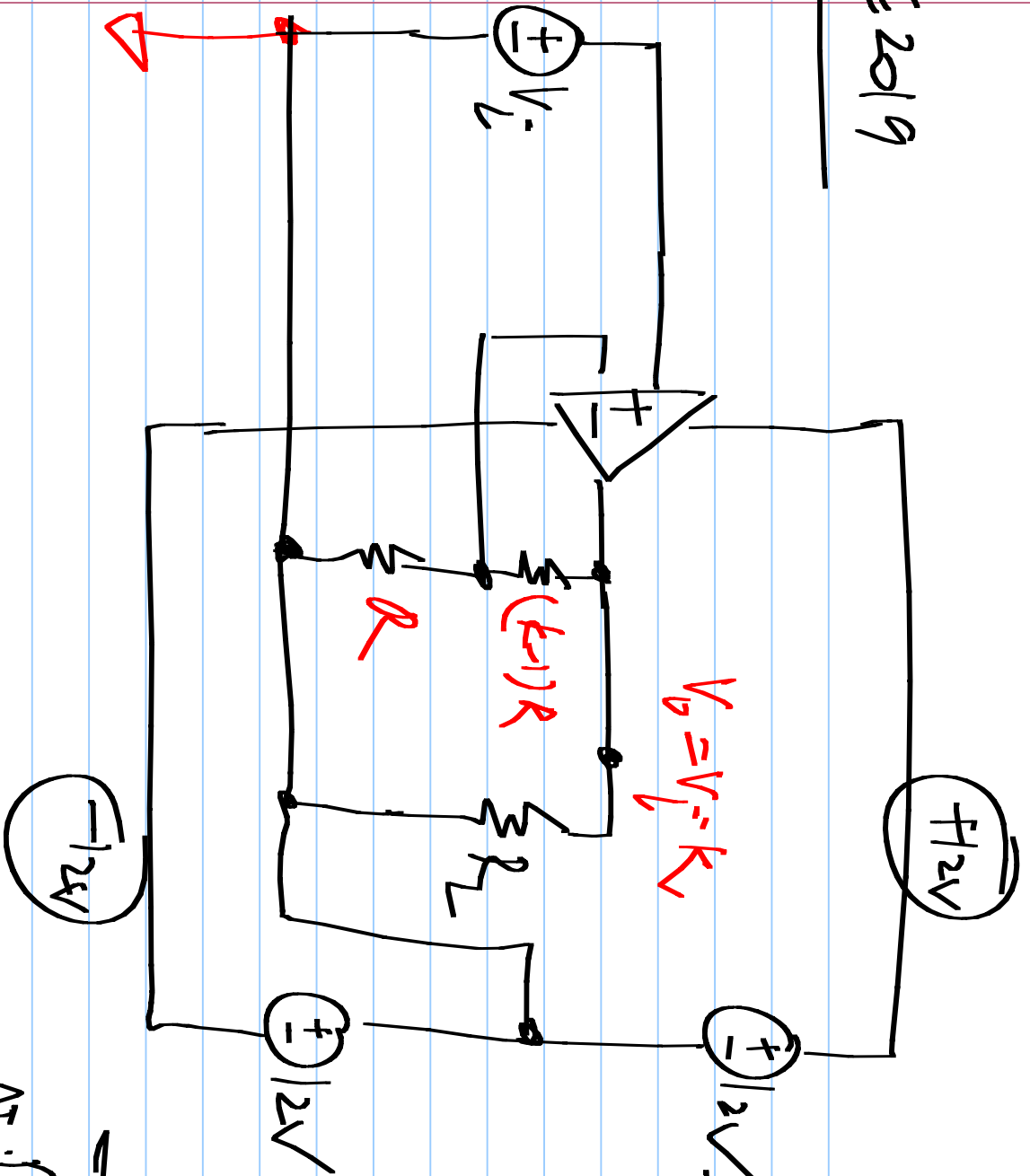


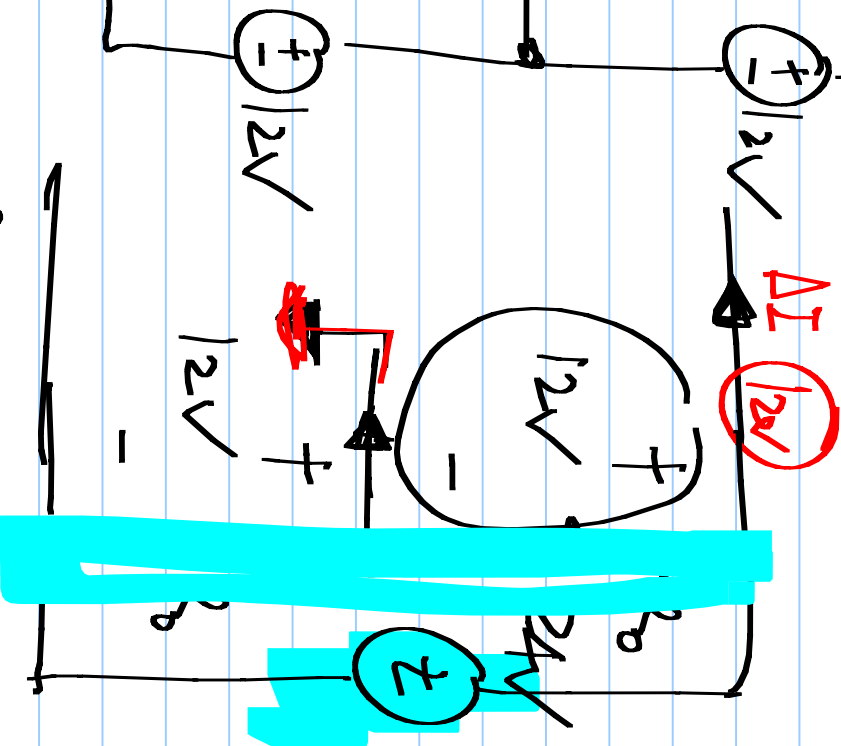
ETE 2019

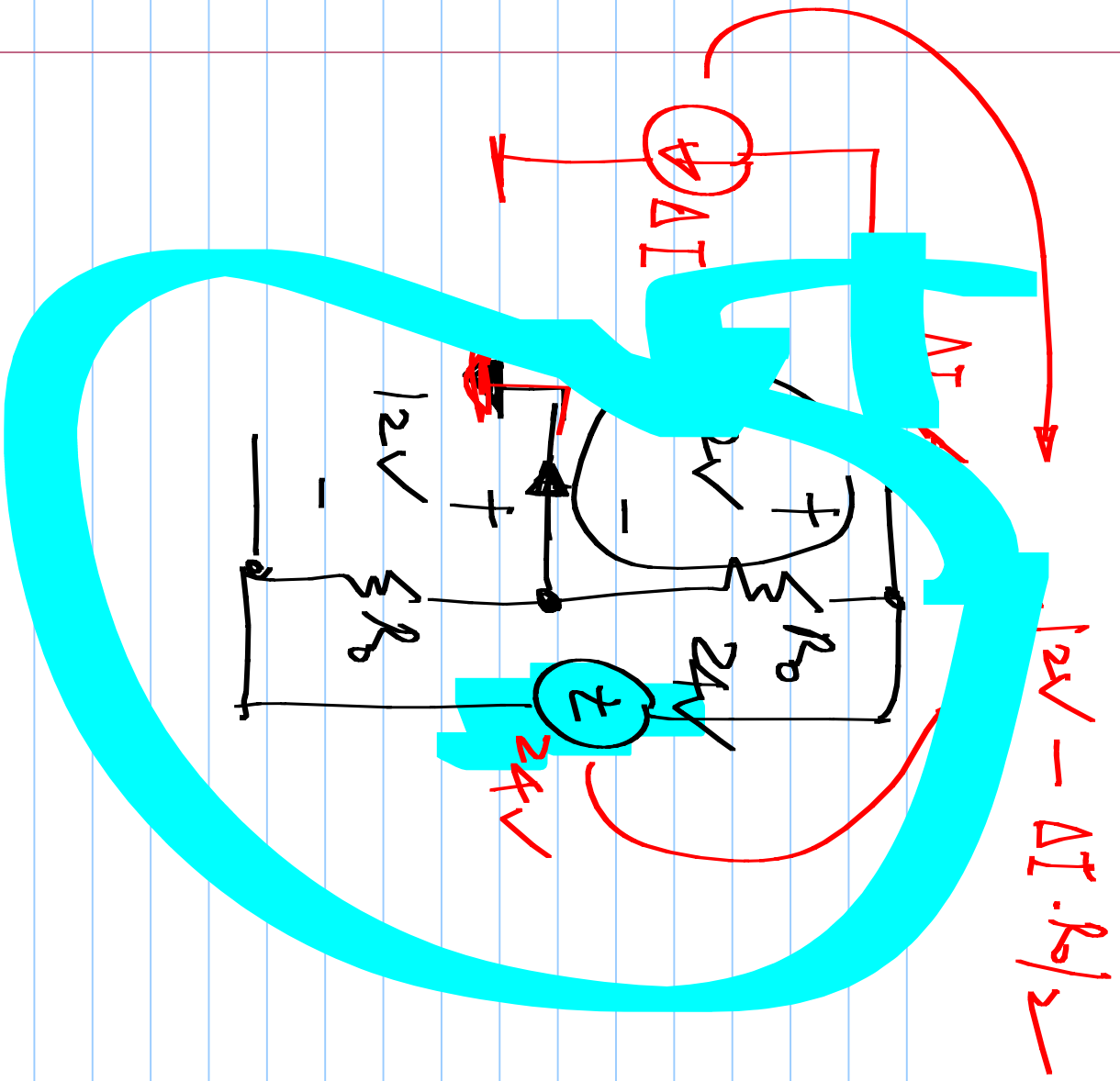


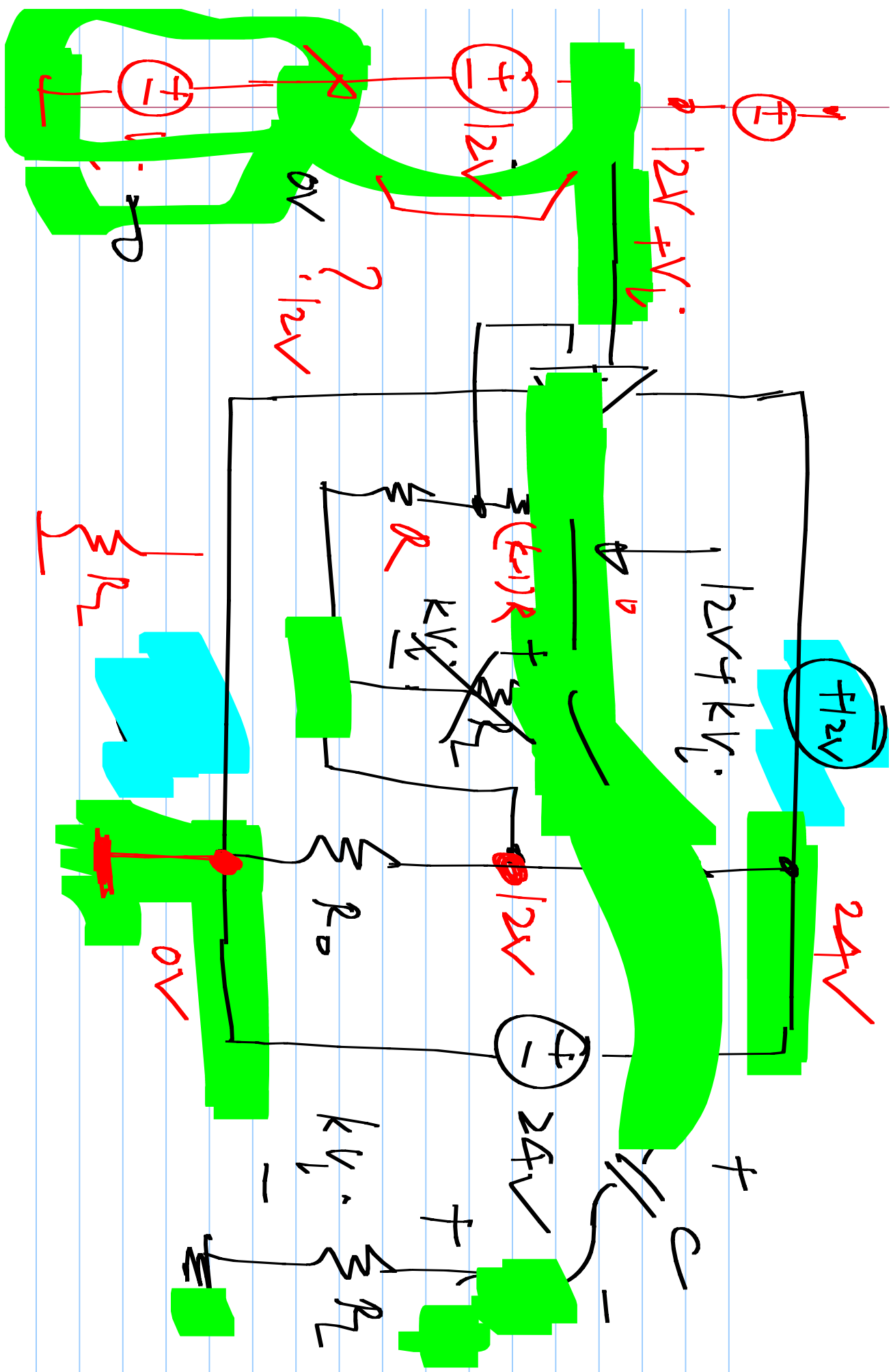
$V_0 = V_L = K$

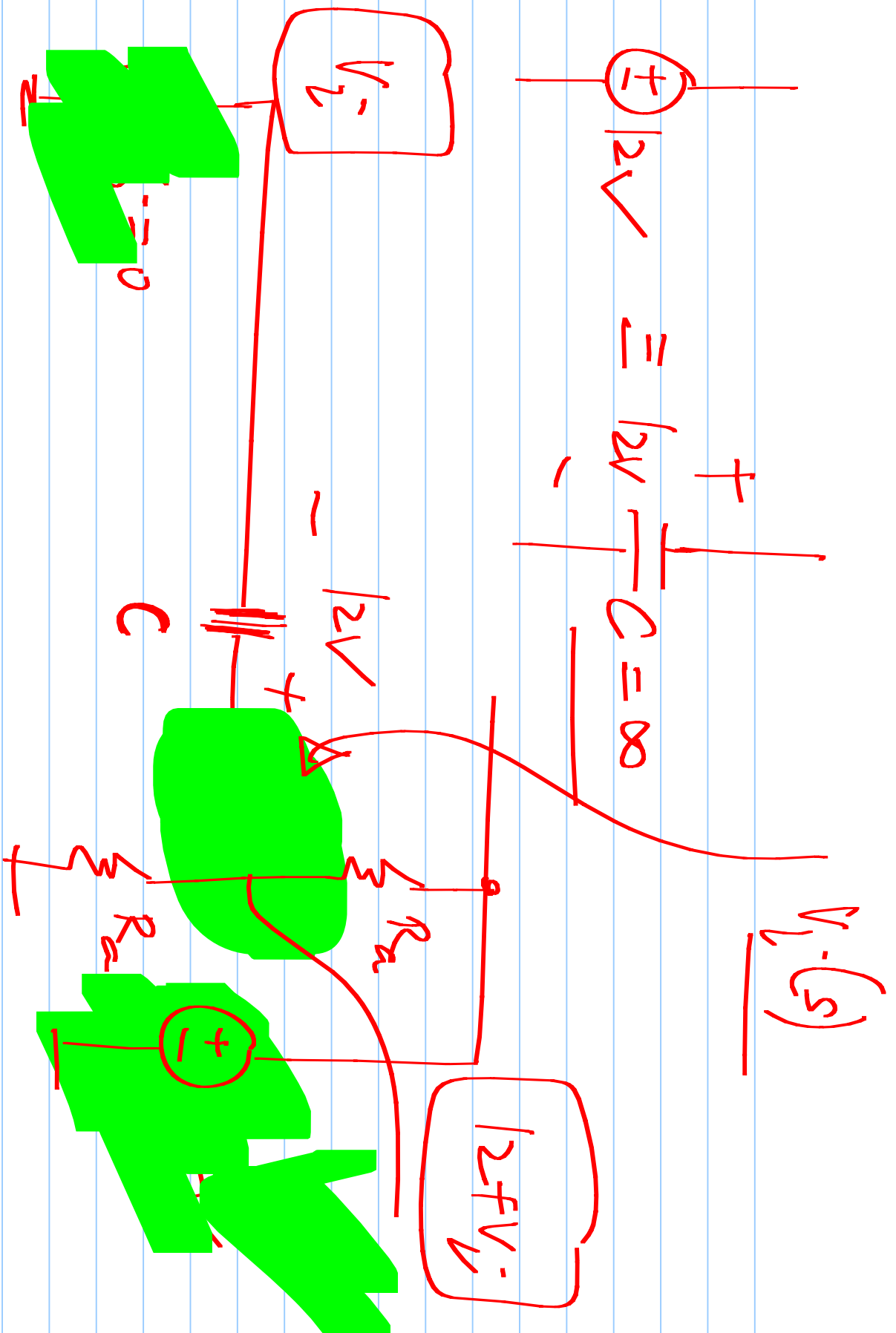
27/1/2017

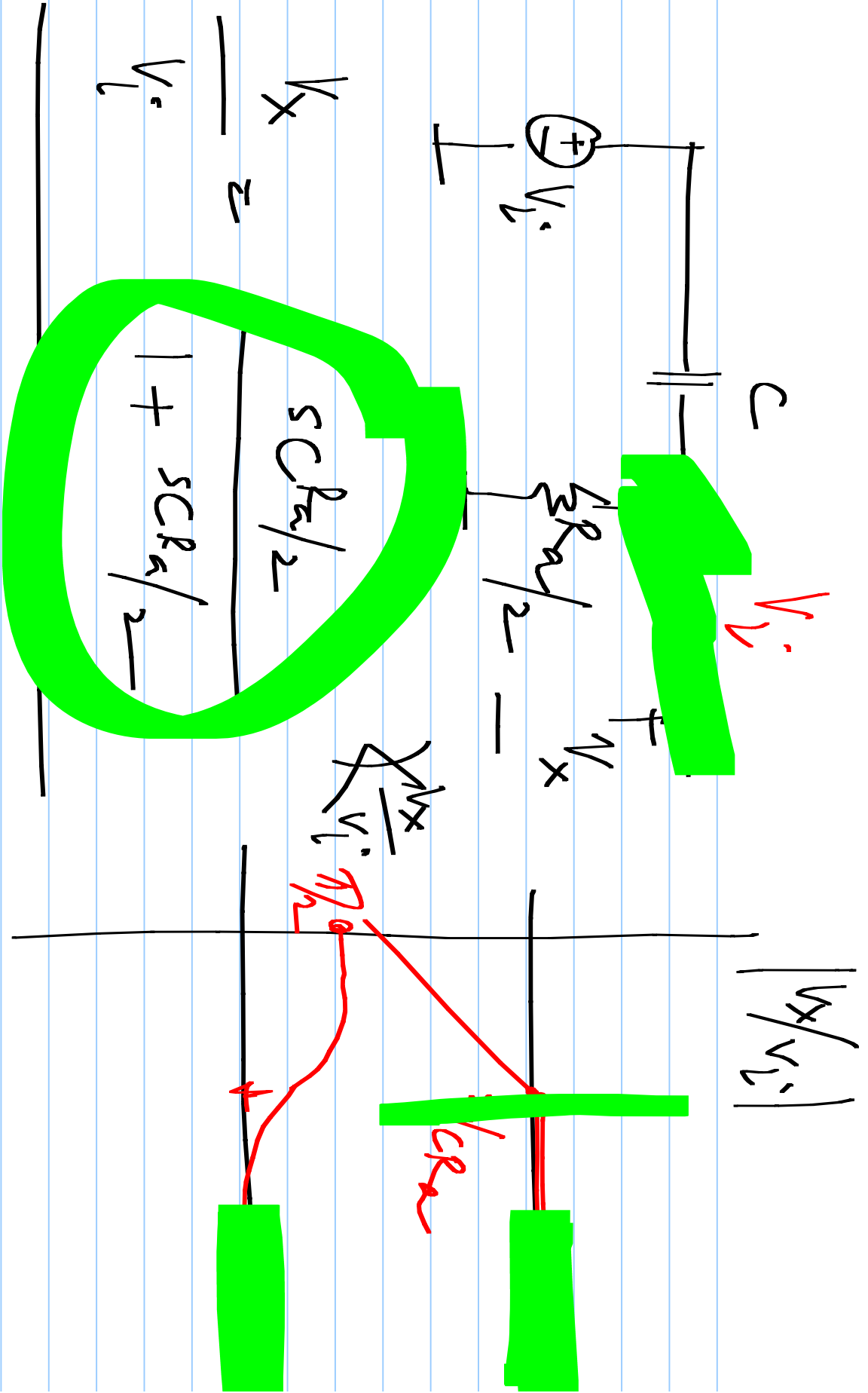
$\Delta I \cdot \frac{1}{2} \ll 12V$











V_i

V_i

$|V_x/V_i|$

$R_a/2$

V_x

V_x/V_i

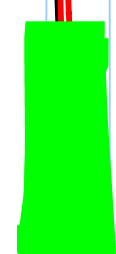
$1/RC$

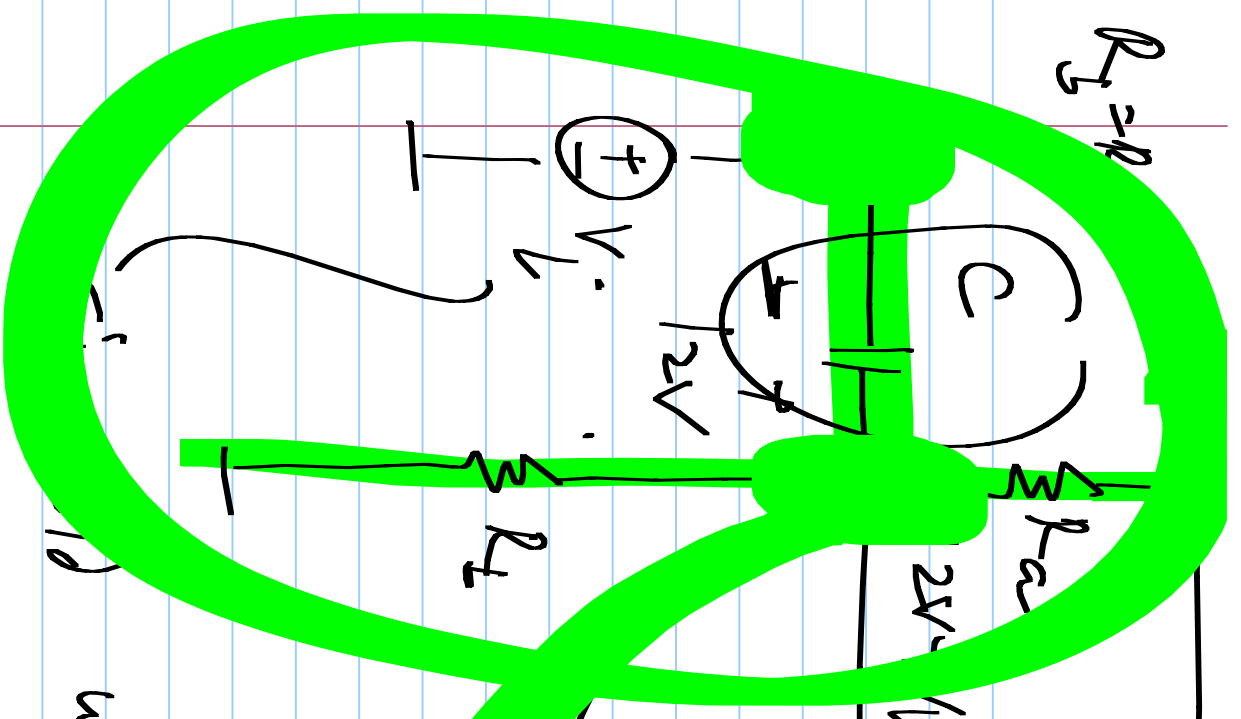
$SC R_a/2$

$1 + SC R_a/2$

V_x

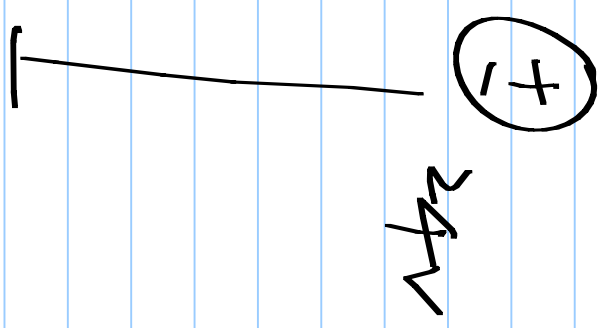
V_i





$$\omega \gg \frac{2}{R_a C}$$

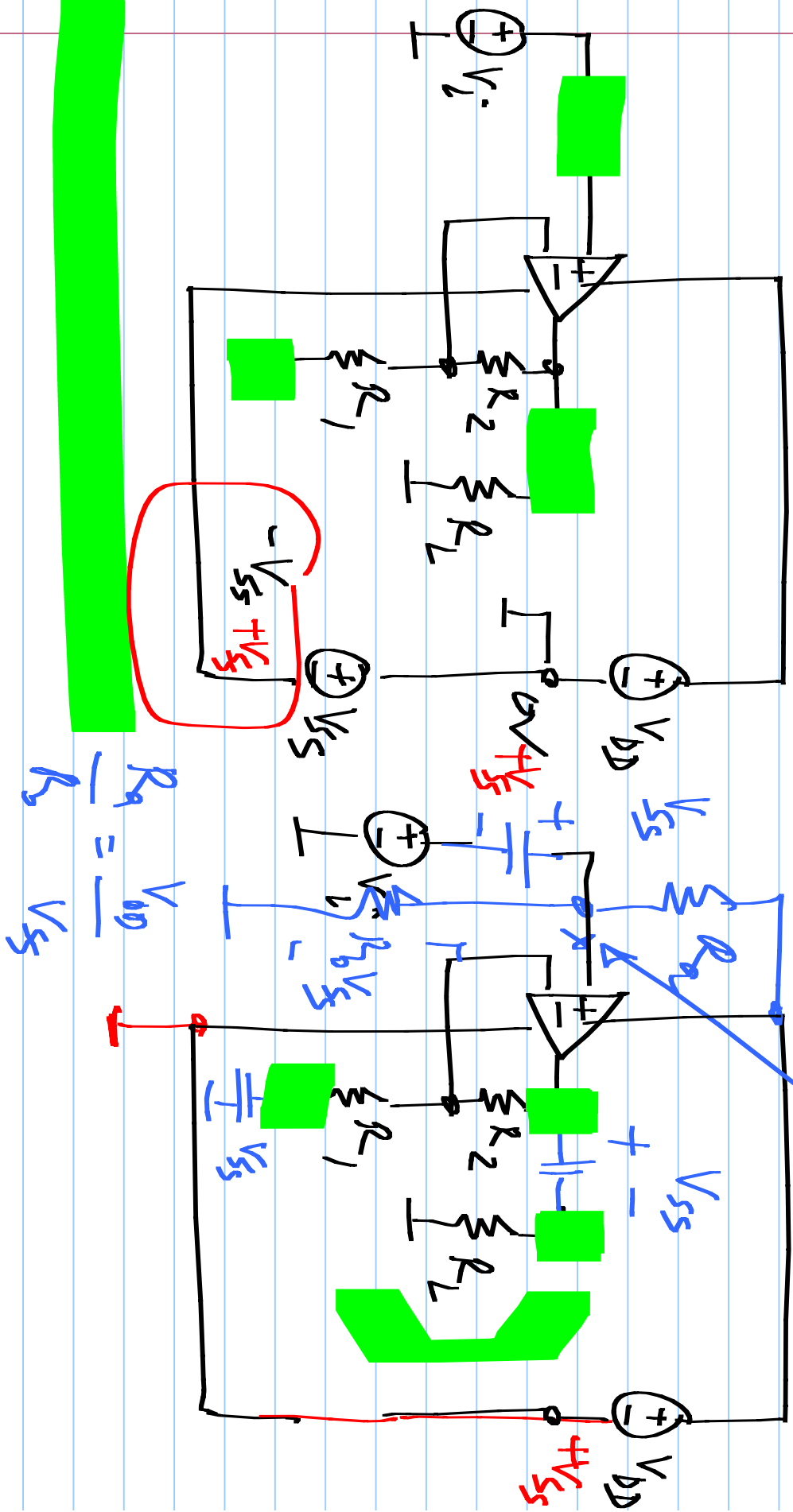
AC-coupling
circuit



EE2019

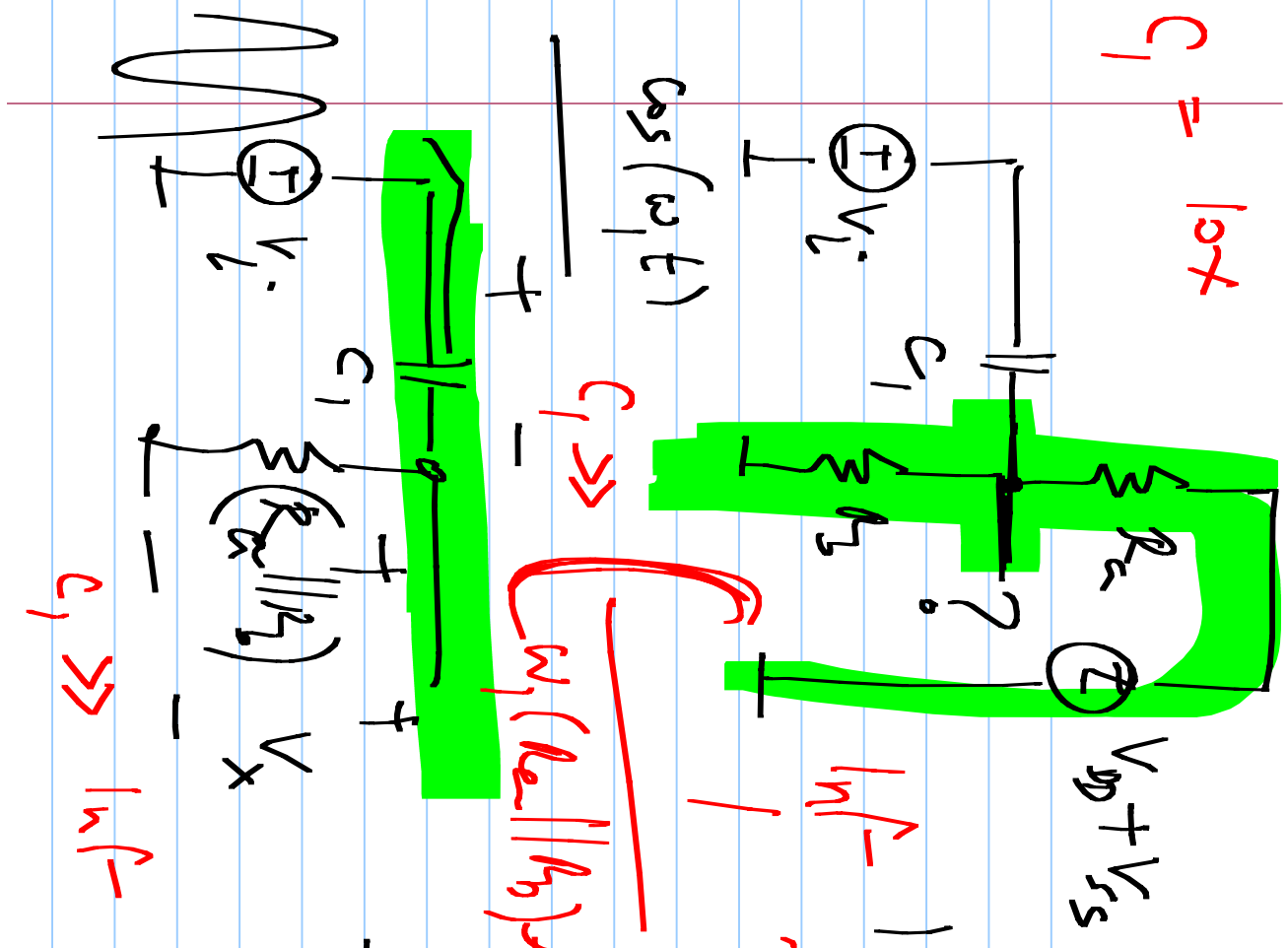
$+V_{DD} +V_{SS}$

3/1/2017

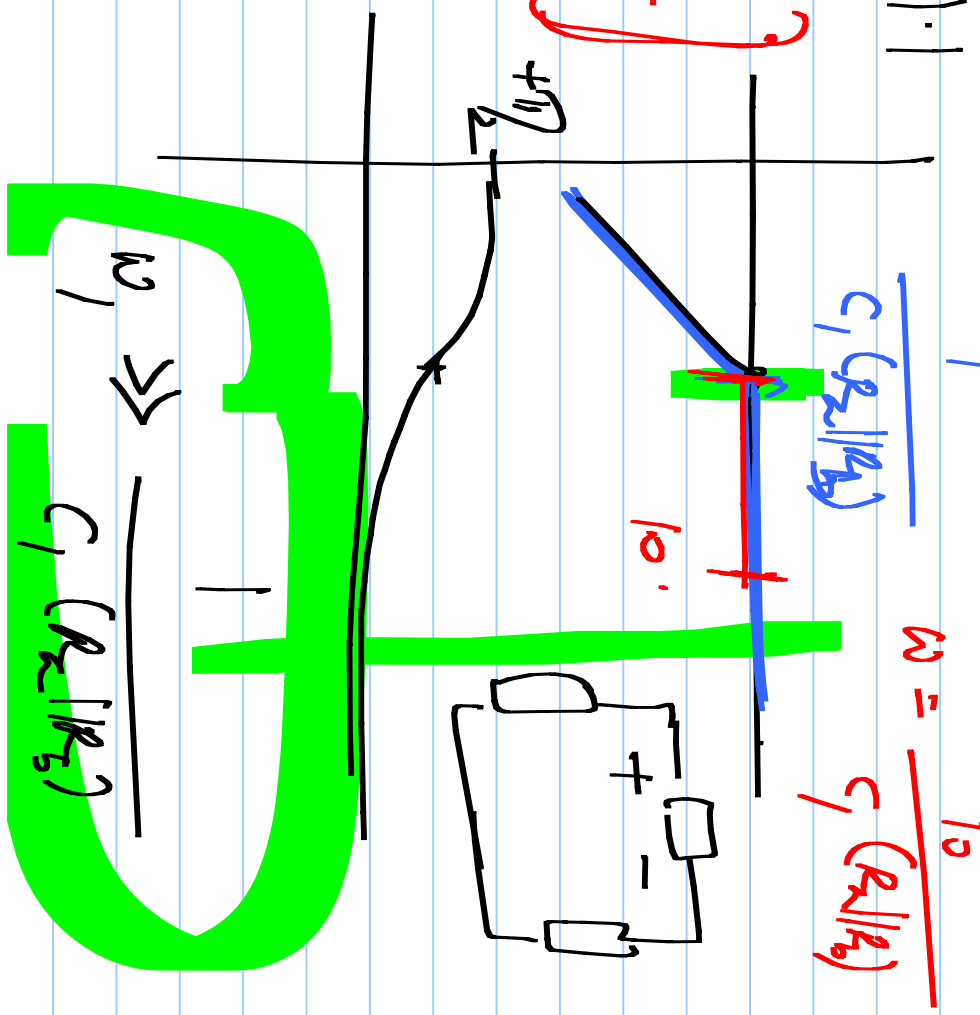


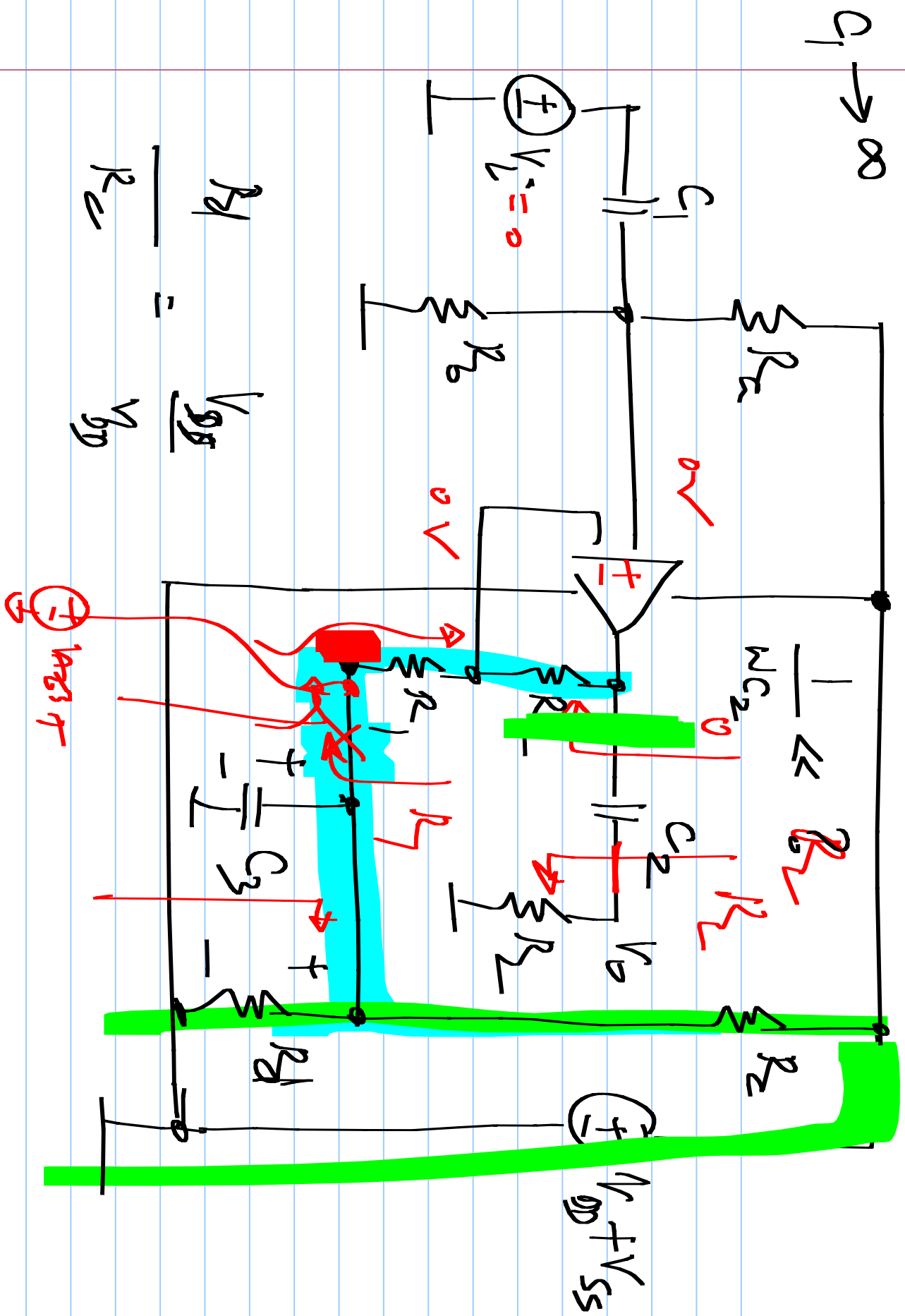
$$R_2 = \frac{V_{DD}}{V_{SS}}$$

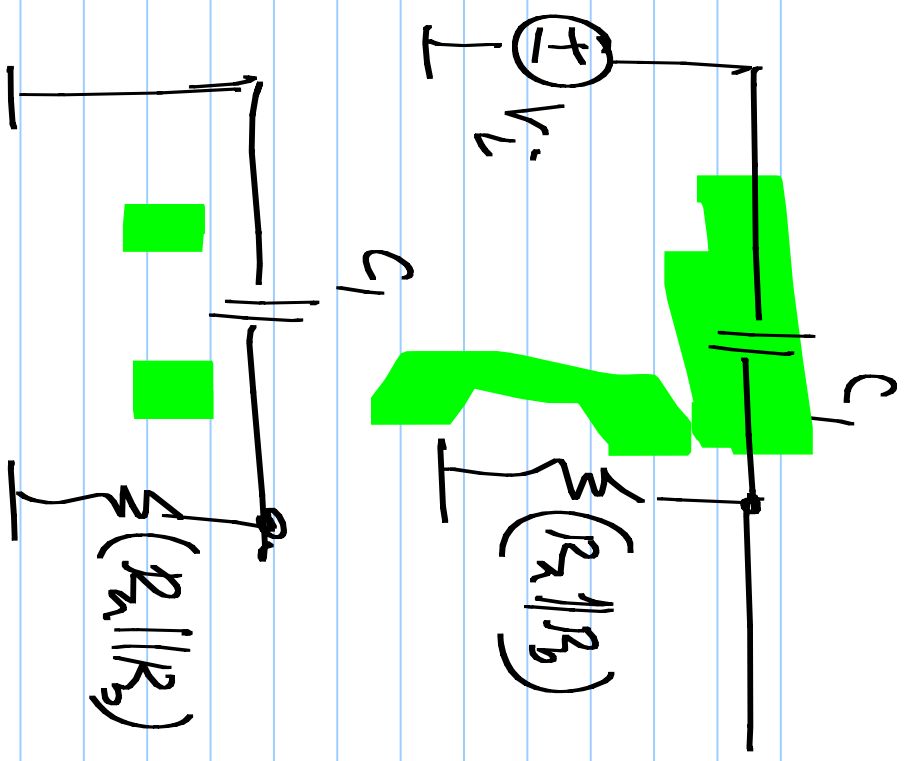
$$C_1 = 10 \mu F$$



$$\frac{V_X(s)}{V_2(s)} = \left[\frac{s C_1 (R_2 || R_1)}{1 + s C_1 (R_2 || R_1)} \right]$$



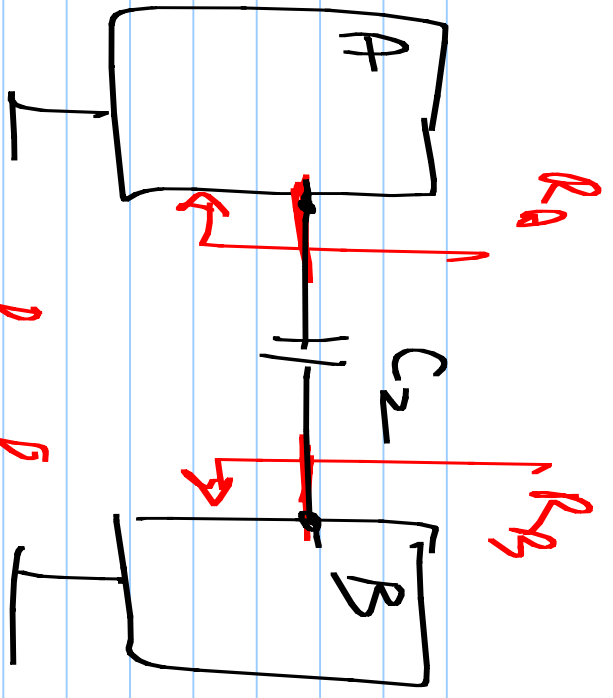
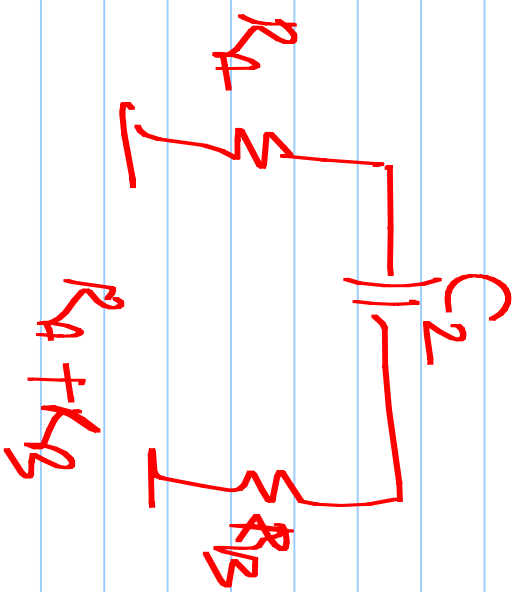




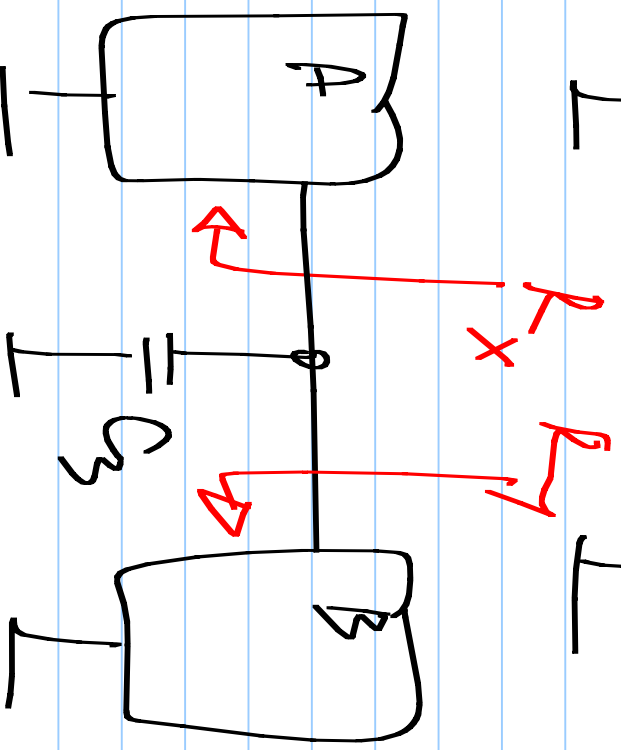
$$C_1 \gg \frac{1}{\omega_1 (R_1 \parallel R_2)}$$

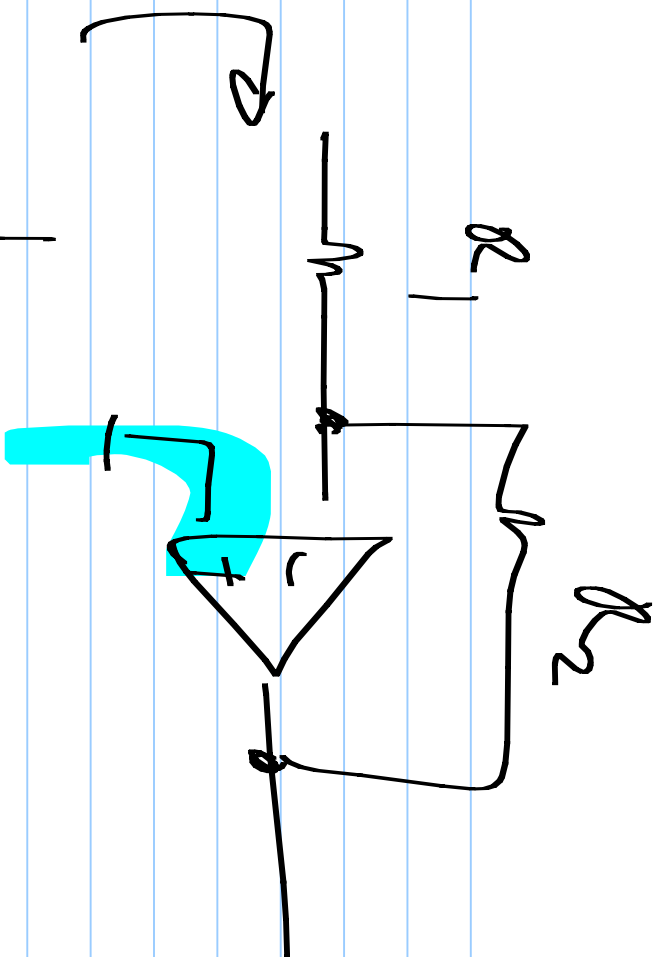
ω_1 : freq. of interest

$$\frac{1}{\omega C} \ll (R_1 \parallel R_2)$$



$R_x || R_y$





$$\frac{v_{C3}}{v_3} \ll$$

$$R_1 \parallel R_2 \parallel R_3$$

$$\frac{v_{C3}}{v_3} \ll \frac{R_1}{R_2}$$

