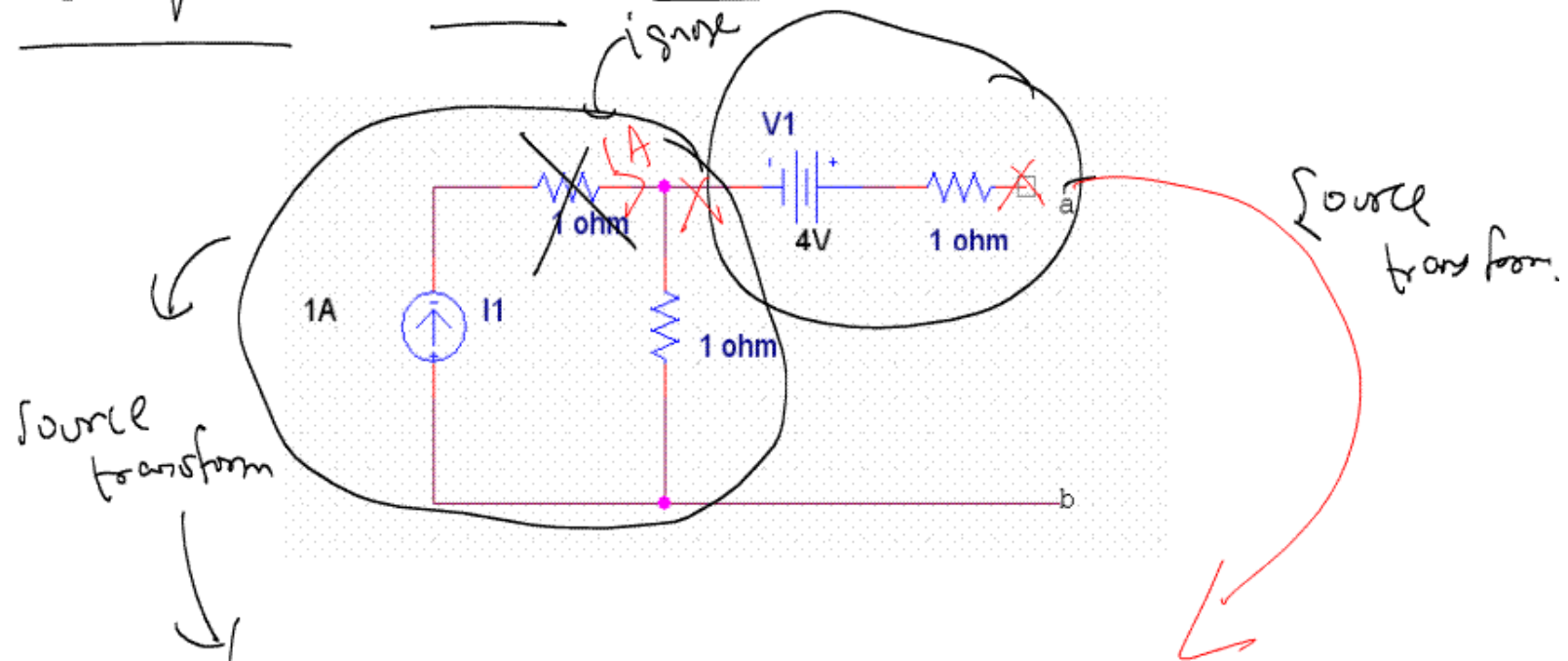
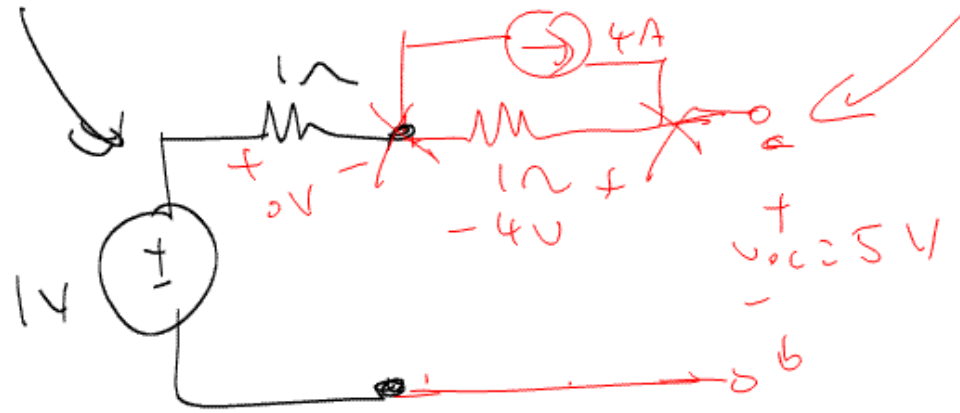


EE100 Discussion Notes #4

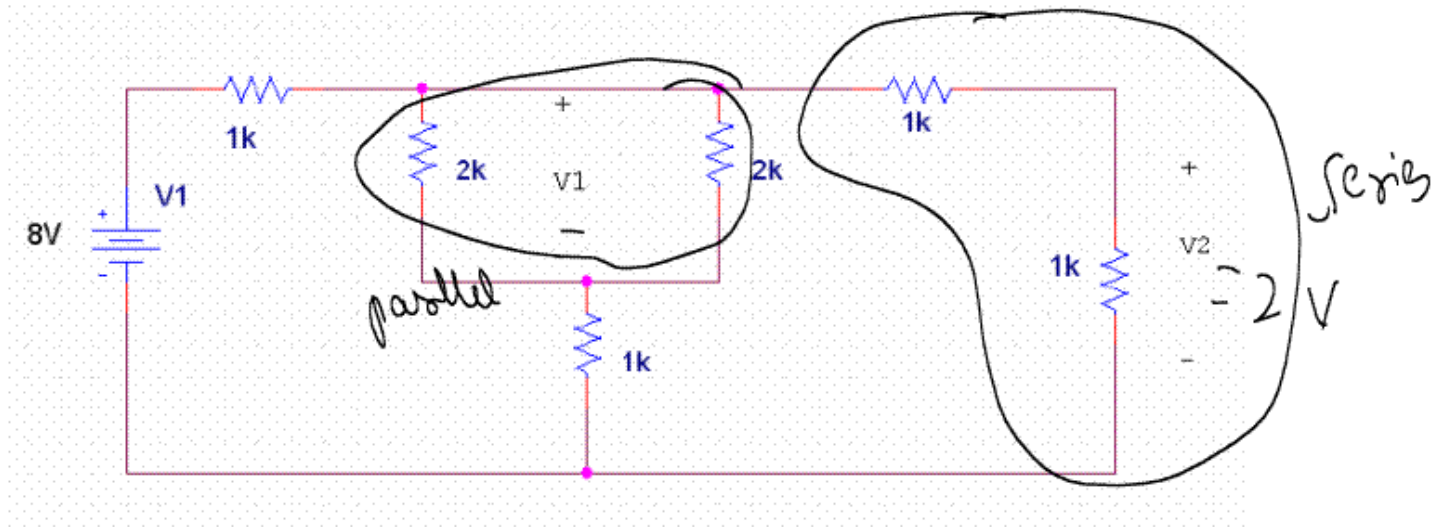
Midterm: → solutions posted later tonight!

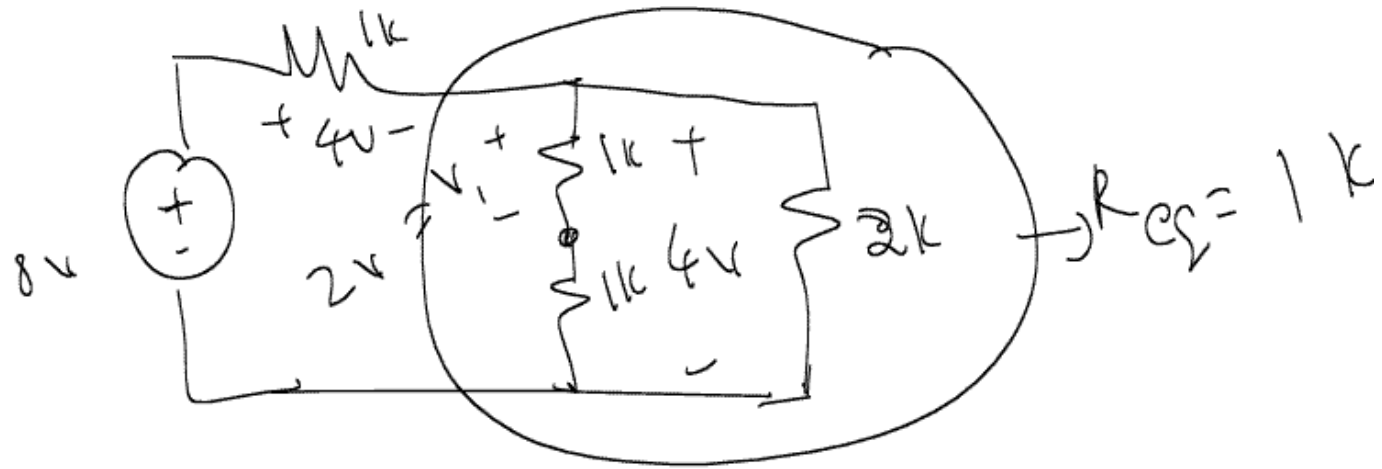
Some questions: 1(c): Conduct source transform.



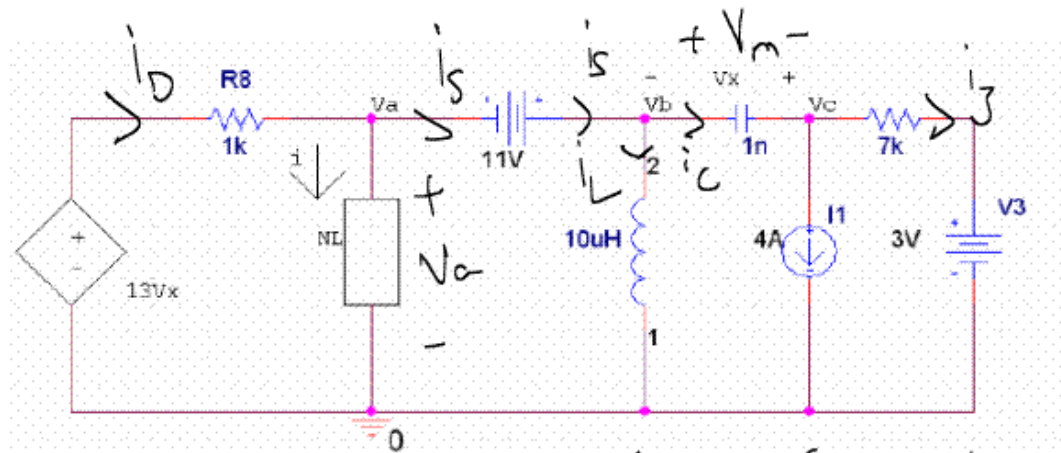


(2)





(3)



Common mistakes \rightarrow (1) AC analysis (i.e. $\frac{1}{j\omega C}$ etc) ~~X~~

(2) No closed form exists!

@ V_{ai} $i_o = i + i_s$

$$\Rightarrow \frac{13V_{ai} - V_a}{1k} = \text{standard sde}(V_a) + i_s$$

@ v_b : $i_s = i_L + i_c \Rightarrow i_s = \frac{1}{10\mu H} \int_0^t v_b(t) + (\ln F) \frac{d}{dt} \left(\frac{V_m}{(V_b - V_c)} \right)$

@ V_{ci} $i_c = 4 + i_3$

$$\Rightarrow (\ln F) \frac{d}{dt} (V_b - V_c) = 4 + \frac{V_c - 3}{2k}$$

Constraints:

$$V_c - V_b = V_{ol}$$

$$V_b - V_a = 11 \text{ V}$$
