

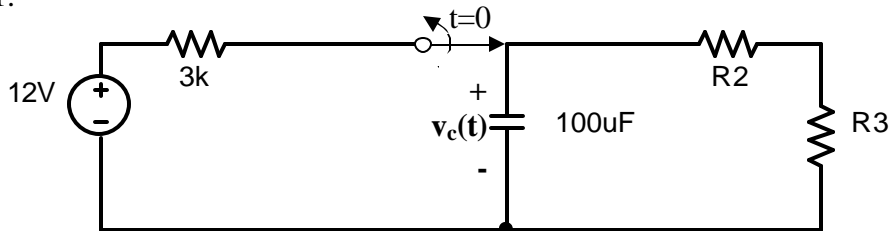
UNIVERSITY OF UTAH
ELECTRICAL AND COMPUTER ENGINEERING DEPARTMENT

ECE 1270

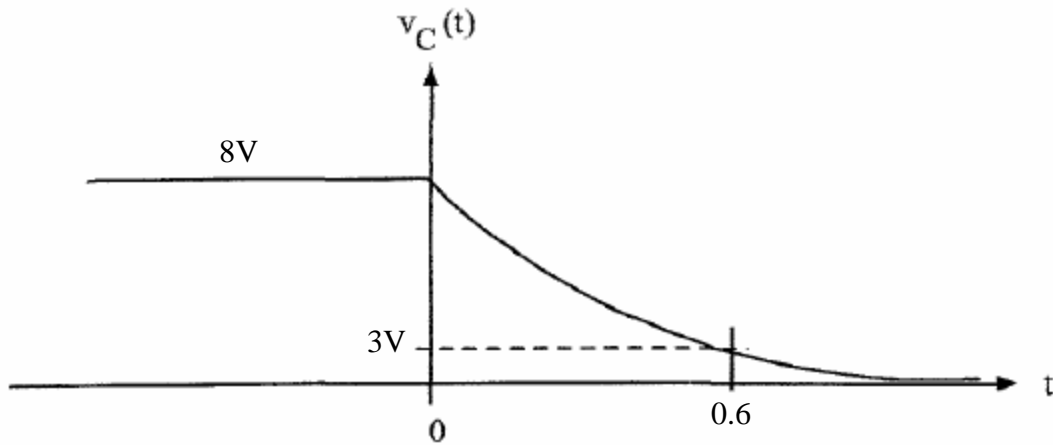
HOMEWORK #5

Summer 2007

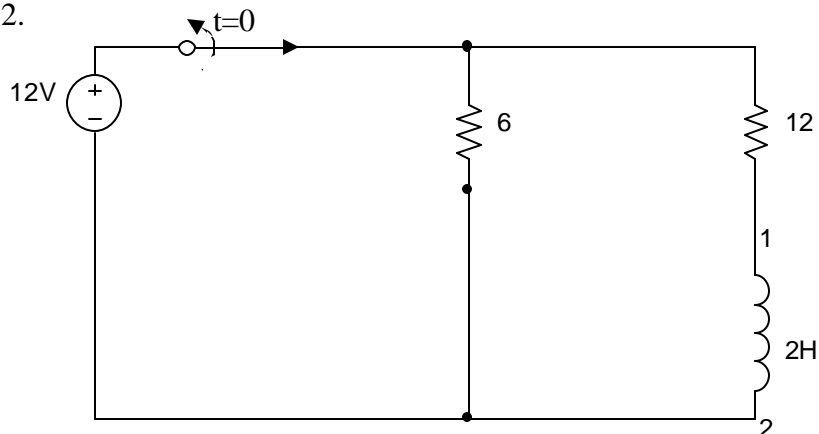
1.



After being closed for a long time, the switch becomes open at $t=0$. Find R_2 and R_3 that give the following plot for $v_c(t)$:

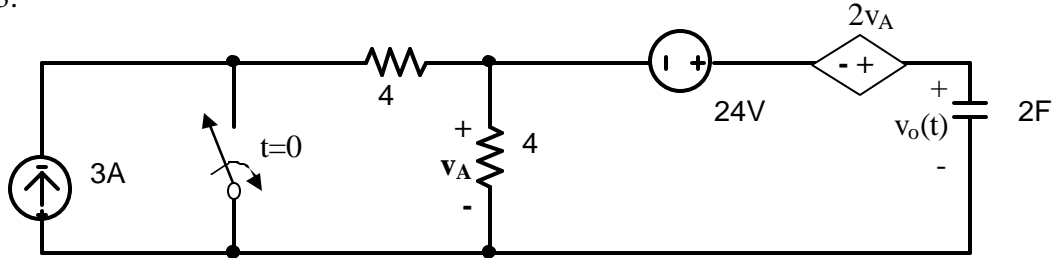


2.



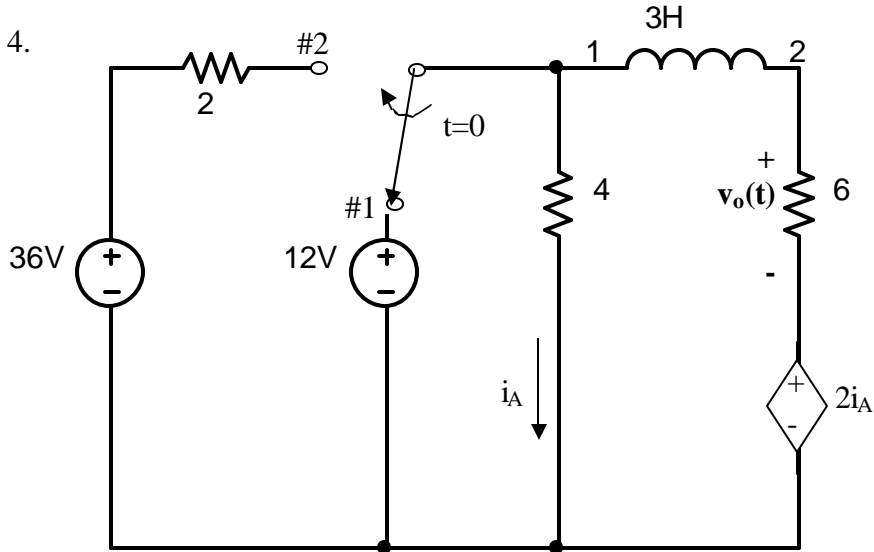
After being closed for a long time, the switch becomes open at $t=0$. Find $i_L(t)$ for $t > 0$.

3.



After the switch has been open for a long time, it closes at $t=0$. Find $v_o(t)$ for $t > 0$.

4.



After the switch is in position 1 for a long time, it switches to position #2 at time $t=0$. Find the output voltage $v_o(t)$ for $t > 0$.