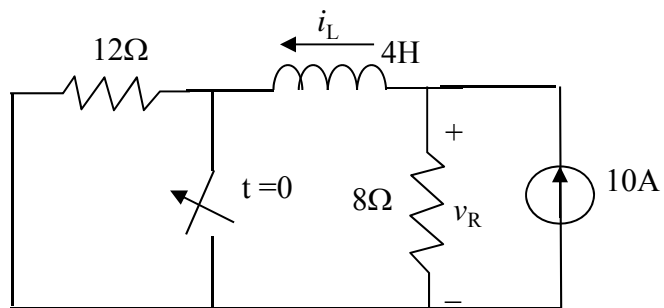


Name: _____

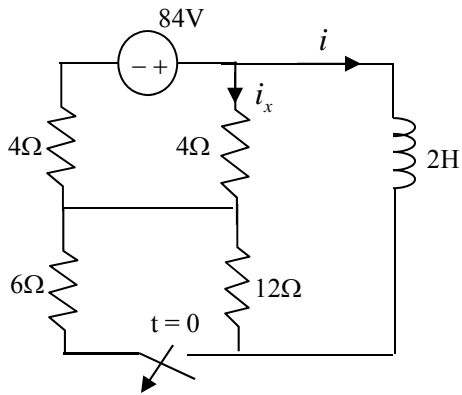
Circuit Theory I (16.201): Final Exam Practice B

Total 25 pts

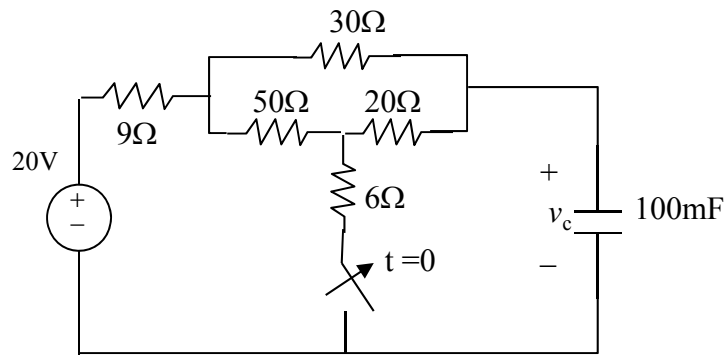
1. (5) The switch in the circuit has been closed for a long time before opening at $t = 0$. Find $i_L(t)$, and $v_R(t)$ for $t \geq 0$.



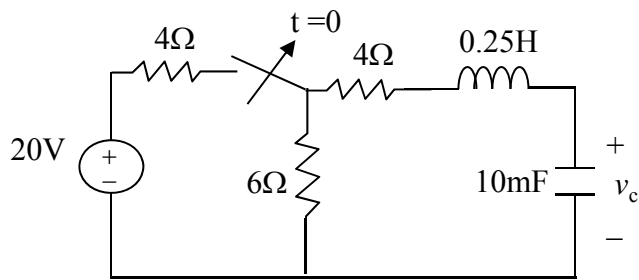
2. (5pts) The switch has been closed for a long time before it is open at $t = 0$. Find $i(t)$ and $i_x(t)$ for $t \geq 0$.



3. The switch has been closed for a long time before open at $t = 0$. Find $v_c(t)$ for $t > 0$.



4. (5pts) For $t < 0$, the switch is closed. Assume that a steady state has been reached by $t = 0$. At $t = 0$, the switch is open. Find $v_c(t)$ for $t > 0$.



5. (5pts) Find $v_c(t)$ and $v_R(t)$ for $t > 0$.

