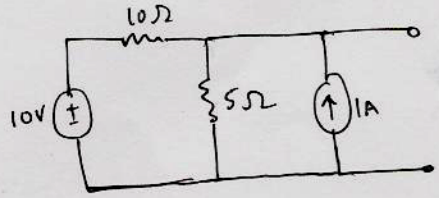
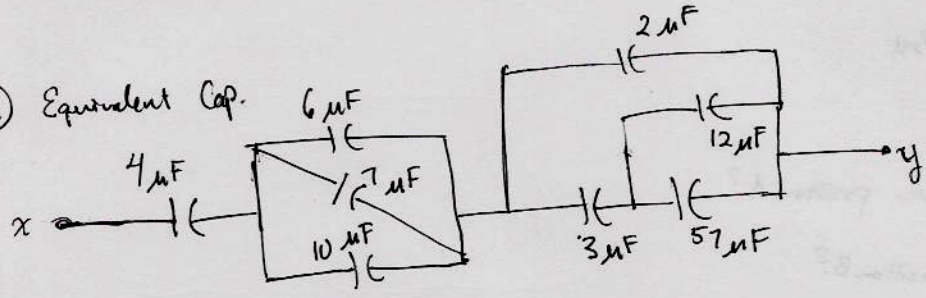
① Find the Thevenin equivalent circuit for

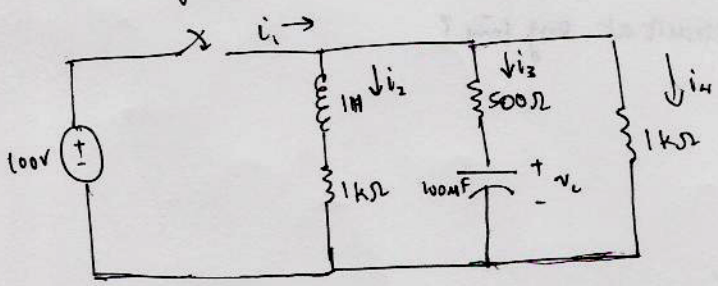


② Equivalent Cap.



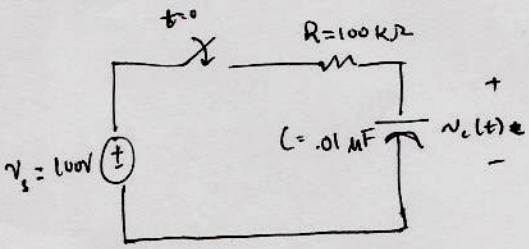
Find the equivalent capacitance between x and y.

③ DC Steady State



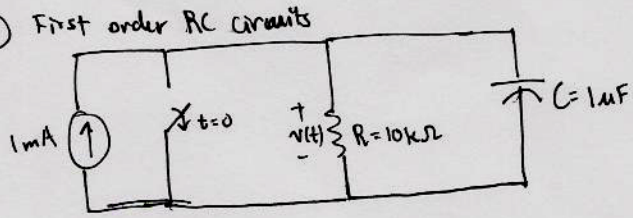
Find i_1, i_2, i_3, v_c in steady state

④ First Order RC circuits



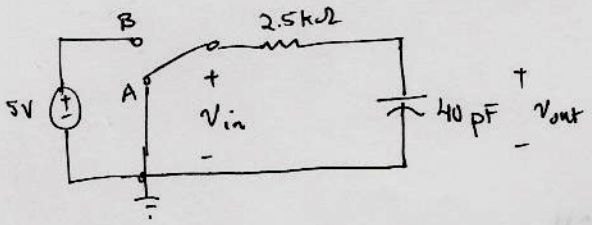
If $v_c(0+) = -50V$, find an expression for $v_c(t)$.

⑤ First order RC circuits



(6) Fall 2002, Midterm 1.

~~Position A~~ ~~Position B~~



a) What is V_{in} when the switch is in position A?

b) What is V_{in} when the switch is in position B?

c) Suppose the switch is in position A for a long time, then instantaneously switches to position B at time $t=0$. Write the equation for $V_{out}(t)$.

d) Graph $V_{out}(t)$

e) What is the maximum current flowing through the circuit at any time?