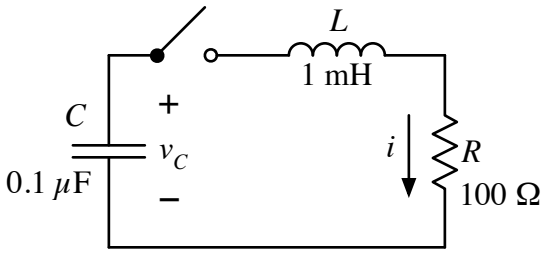
EE 201 — HW 6.11 Name_____

In the circuit at right, the capacitor is initially charged to 10 V. The switch has been open for a very long time and then closes at $t = 0$. Determine the expressions for the capacitor voltage and the current for $t > 0$. Write each equation in two forms, one with symbols and then again with correct values calculated for the decay constant, oscillation frequency and amplitudes. (Yes, the current expression gets a bit messy at first, but cleans up a bit once you combine terms and insert values.)



$v_C(t)$ = _____

= _____

$i(t)$ = _____

= _____

Write your answers — and whatever work will fit — on this sheet. Staple any sheets with additional work behind.