

ECE 214 — Exam #2

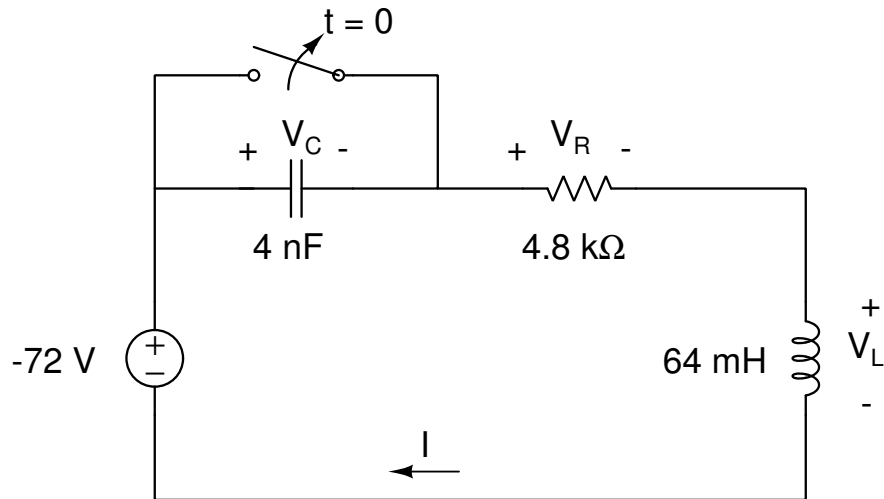
Estimated time for completion: ≤ 1.25 hour
26 April 2016

Rules of the Exam

- Rule 1:** The examination period begins at 8:00am on Tuesday 26 April 2016 and ends at 9:15am on Tuesday 26 April 2016.
- Rule 2:** The exam is worth 15% of your grade.
- Rule 3:** To receive credit for the answer make sure to include the units along with the numerical answer and show all work.
- Rule 4:** There is minimal partial credit.
- Rule 5:** The exam is closed book and closed notes. You may use your ECE 214 Laboratory Notebook and a calculator.
- Rule 6:** Do not discuss this exam with anyone until after 1:00pm on Tuesday 26 April 2016.

Name

Problem: Step response for a series RLC circuit. The switch in the circuit below has been closed for 37,321 years and opens at time $t = 0$. Complete the table for the circuit:



	$t = -50\mu\text{s}$	$t = 0^+ \text{ s}$	$t = 50\mu\text{s}$	$t = \infty$
V_C				
V_R				
V_L				
I				

Extra Credit:

At what time after the switch opens is the voltage across the inductor a maximum? _____

Name: _____

Name: _____

Name: _____