Peoplesoft ID Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

ECE 2202 – Quiz #3

July 28, 2021

1. You may use one 8.5” x 11” crib sheet, or its equivalent. Do not communicate with anyone except Dr. Dave Shattuck while you are taking this quiz.

2. Show all work necessary to complete the problem. Use additional sheets of paper as needed. A solution without the appropriate work shown will receive no credit. A solution which is not given in a reasonable order will lose credit. Include this page with your Peoplesoft ID Number, or include a different, separate page with your Peoplesoft ID Number. Do not write your name on this quiz. Failure to follow these rules will result in points being deducted.

3. Show all units in solutions, intermediate results, and figures. Units in the quiz will be included between square brackets.

4. Do not use red ink. Do not use red pencil.

5. You will have 40 minutes to work on this quiz, plus additional time to print, scan and email your work. Use a filename which is your Peoplesoft ID Number, followed by Quiz3. Post your solution on Blackboard, in the same way you submit homework assignments. It must be submitted by 3:50pm, or points will be deducted.

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Use the circuit below to solve. The switch SW1 was in position a, and switch SW2 was open for a long time before *t* = 0. Then, switch SW1 moved to position b, and switch SW2 closed, both at *t* = 0. The resistance values, including the coefficient of the dependent source, are all given in [Ohms].

1. Find *vD*(0.75[s]).
2. Find the energy stored in inductor *LA* at *t* = 0.75[s].



Diagram, schematic

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