Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (please print)

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

ECE 2201 – Quiz #3

June 19, 2020

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 printed name and signature, or include a different, separate page with your printed name and signature. Failure to do this 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. Email your completed quiz to [Shattuck@uh.edu](mailto:Shattuck@uh.edu). It must be sent by 3:50pm, or points will be deducted.

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A device can be modeled with a voltage source in series with a resistance. The device is shown in Figure 1. When the device is measured, two cases were obtained, as given in Table 1. Then the device was connected in Figure 2. Note the positions of terminals A and B for the device in Figure 2. All resistances in Figure 2 are given in [kOhms].

1. Find the model for the device, and draw it. Show the numerical values and terminals A and B on your model.
2. Find the power delivered by the device in Figure 2.

  





