Homework 1

Due in 1 Week

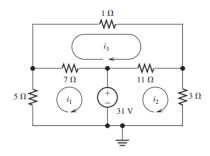
Instructions for Homework:

- 1) Solve the following problems by hand on an A4 size paper, clearly explain your results. <u>Draw a box</u> for the numeric value you found for the answer. It is your responsibility to show a clearly written and step by step solutions for the homework questions. If the TA cannot read your answer, you will NOT get any point for that question
- 2) Scan your answers into PDF with a file name as "StudentName_LastName_StudentID.pdf". It is your responsibility to make sure the scanned documents readibility is clear. You will not get any points for blurry or low quality answers
- 3) Upload your answer into **Esuzem HW1 section before the deadline.** If the you reach the max file size for Esuzem, upload a document with an active google drive link as a PDF and public access. If the TA cannot download your PDF, you will get a zero point for the homework.

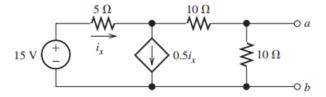
Submit your solutions for the questions below from our text book (7th Ed Allan Hambley, Electrical Engineering Principles)

Q1)

P2.68. Solve for the power delivered by the voltage source in Figure P2.68, using the mesh-current method.



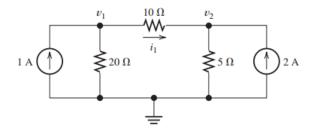
P2.88. Find the Thévenin and Norton equivalent circuits for the circuit shown in Figure P2.88.



Q2)

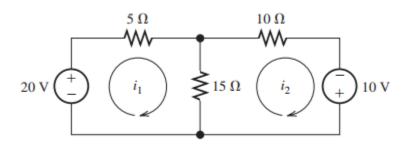
Q3)

***P2.48.** Write equations and solve for the node voltages shown in Figure P2.48. Then, find the value of i_1

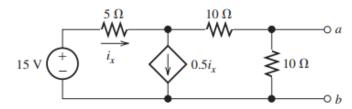


*P2.65. Solve for the power delivered to the 15- Ω resistor and for the mesh currents shown in Figure P2.65.

Q4)



P2.88. Find the Thévenin and Norton equivalent circuits for the circuit shown in Figure P2.88.



Q5)