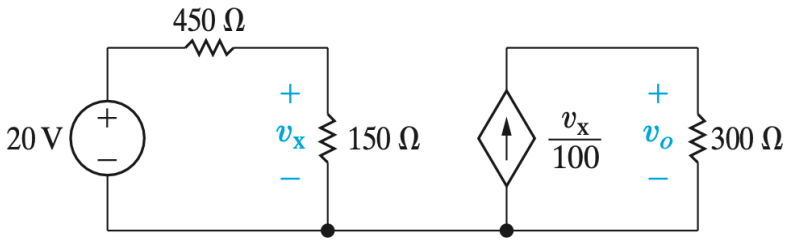
Faculty of Engineering
Department of Electrical-Electronics Engineering

EEM19215E – Electric Circuits
Midterm Exam (25/11/2021) 13:00-14:40

Student Name: **Student ID:**

Q.1: (10 Points)
For the circuit shown below, find v_o and the total power absorbed in the circuit.



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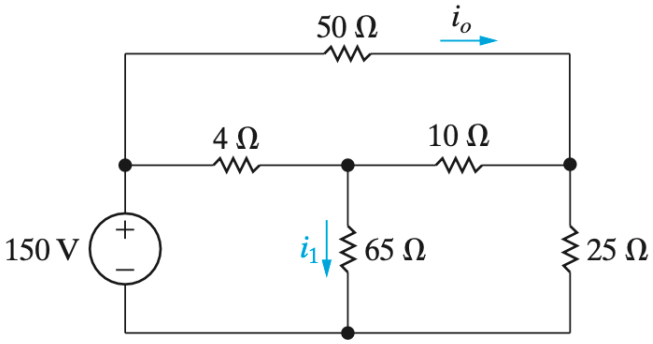
Q.2: (10 Points)
The current i_o in the circuit shown below is 1 A.

a) Find i_1
b) Find the power dissipated in each resistor.
c) Verify that the total power dissipated in the circuit equals the power delivered by the 150 V source.



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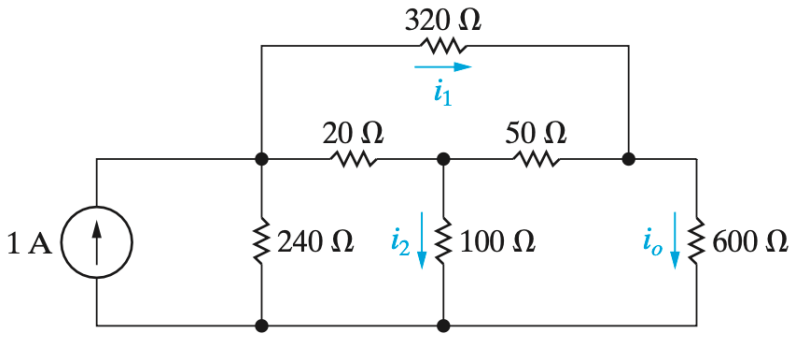
Q.3: (10 Points)
Use a Y-to-Δ transformation to find (a) i_o; (b) i_1; (c) i_2; and (d) the power delivered by the ideal current source in the circuit below.



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Q.4: (10 Points)
Find v_1 and v_2 in the circuit below using voltage and/or current division.