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PROBLEMS TO ACCOMPANY

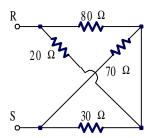
ENGINEERING DEPT AN INTRODUCTION TO ELECTRICAL ENGINEERING NAME

COURSE EGR 104

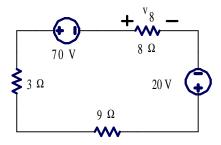
SUBJECT PS# 9-7

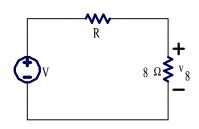
PAGE 1 OF 2 DATE

24.) What will an ohmmeter read if it is connected to nodes R and S?



25.) Write KVL equations for each circuit shown below. Use Ohm's law to express the KVL equations in terms of two unknowns, the loop current and v_8 . Simplify the equations. By observing the simplified equations assign values to V and R in the circuit on the right below so that it is equivalent to the circuit on the left with respect to the voltage across and the current through the 8 Ω resistor. (The two simplified KVL equations should then be similar.) Then use the voltage divider equation to find v_8 . Hint: This problem is easier if you label the loop current so that the passive sign convention is satisfied in both circuits for the 8 Ω resistor.





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26.) Circuit elements A, B, and C are either voltage sources or resistors. Some current measurements have been made and are shown on the circuit schematic. Which of A, B, and C cannot possibly be resistors? Replace those with voltage sources of an appropriate voltage. Replace the others with resistors of appropriate resistances. Hint: Consider power.

