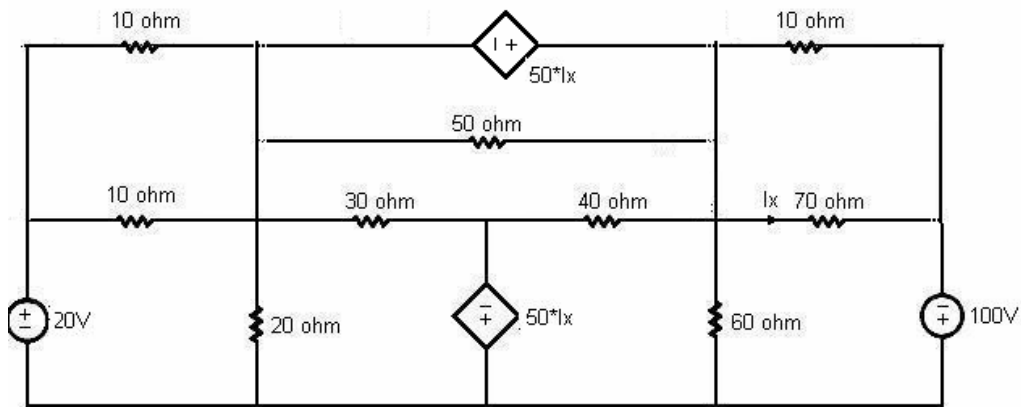


ECE 201: Linear Circuit Analysis I:
Chapter 4: Nodal Analysis
MOCK QUIZ

1. (a) How many nodes are present? (b) Label the essential nodes with an 'e'. (c) Chose an appropriate reference node. (d) Write equations for the node voltages corresponding to each essential node 'e'. (e) What is the power delivered by the two independent voltage sources? (f) What are the dependant voltage sources doing in terms of power, and how much? (g) What is the total power absorbed by the electrical system?



2. (a) How many nodes are present? (b) Label the essential nodes with an 'e'. (c) Chose an appropriate reference node. (d) Write equations for the node voltages corresponding to each essential node 'e'. (e) What is the voltage across and the current through the 30Ω resistor? (f) What is the voltage across the $2A$ current source? (g) What is the total power absorbed by the electrical system?

