

Name _____

EE 2240

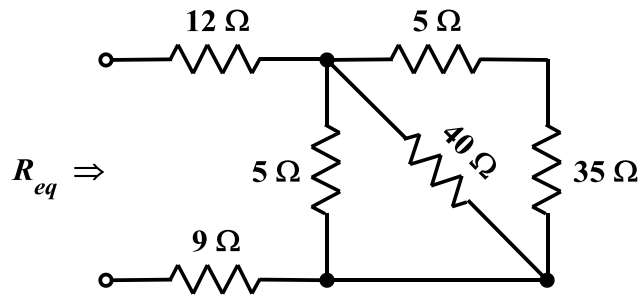
Exam #1

Thursday, September 22, 2016

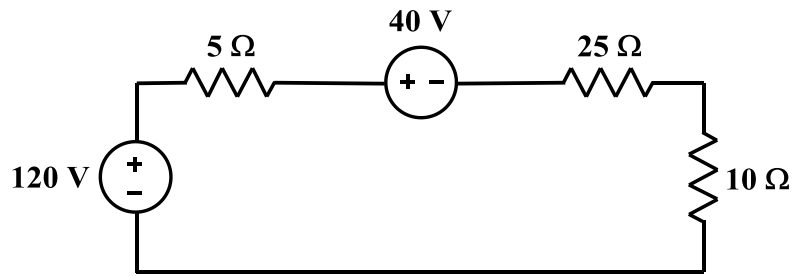
LIBR B32 and TAB 115, 9:30PM – 10:45PM

[closed book – one one-sided 8½”×11” page of notes and calculator allowed, nothing else]

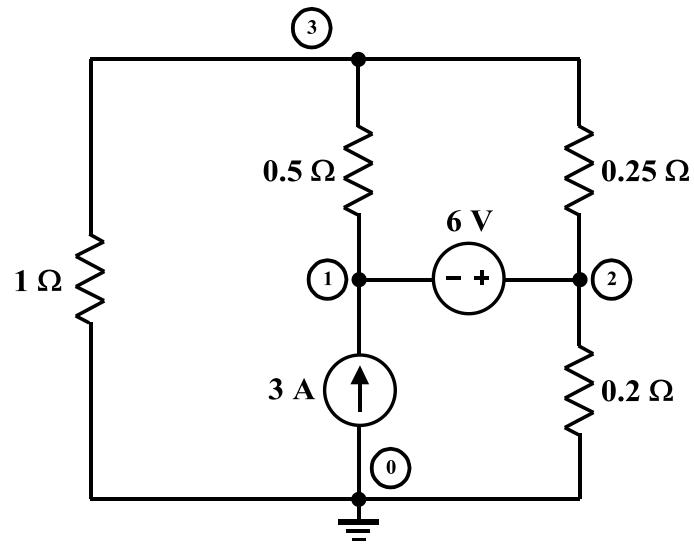
1. Determine the value of R_{eq} for the collection of resistors shown.



2. Determine the amount of power absorbed by the 10Ω resistor.



3. Determine a set of equations that could be used to analyze the circuit shown by the nodal-analysis method, and express them in the standard matrix form discussed in class. Use the node labels that are already assigned. *Do not attempt to solve the equations.*



4. Determine a set of equations that could be used to analyze the circuit shown by the mesh-analysis method, and express them in the standard matrix form discussed in class. Use the mesh currents that are already assigned. *Do not attempt to solve the equations.*

