

Name _____

EE 2240

Exam #2

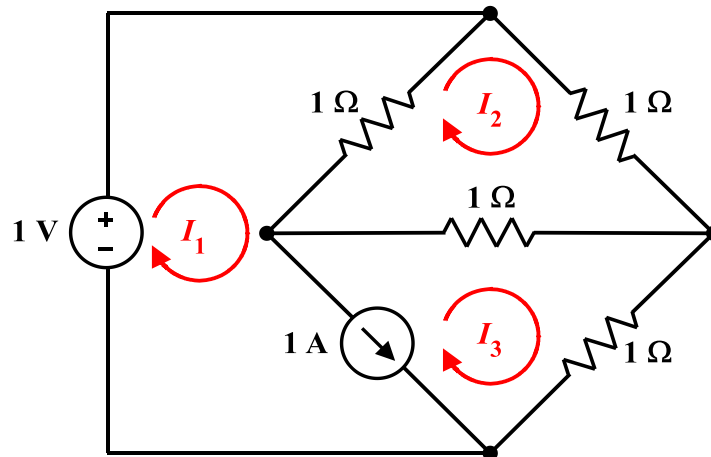
Friday, March 3, 2017

LIBR B07B13 and TAB 115, 9:00AM – 9:50AM

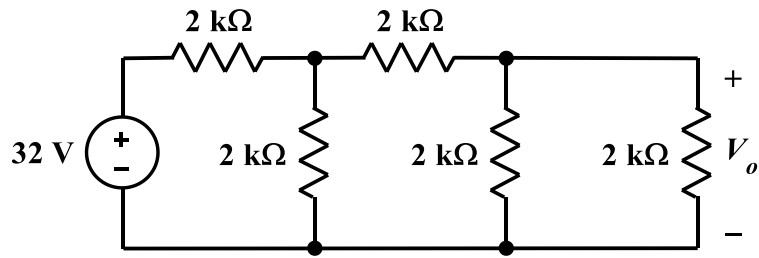
[closed book – one one-sided 8½”×11” page of notes and calculator allowed, nothing else]

Work must be shown in a neat and orderly fashion if you expect to receive partial credit.

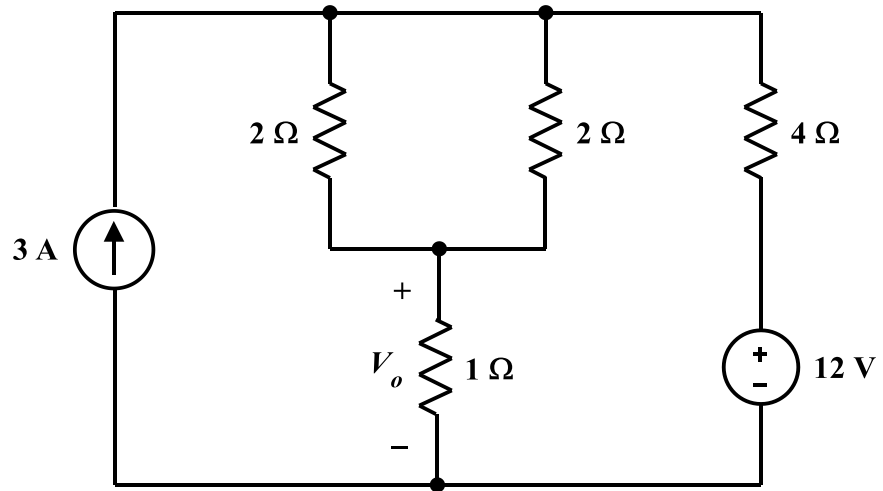
1. Use the method discussed in class to determine a set of mesh equations describing the circuit shown, and express them in the standard matrix form. Use the mesh currents that are already assigned. *Do not attempt to solve the equations.*



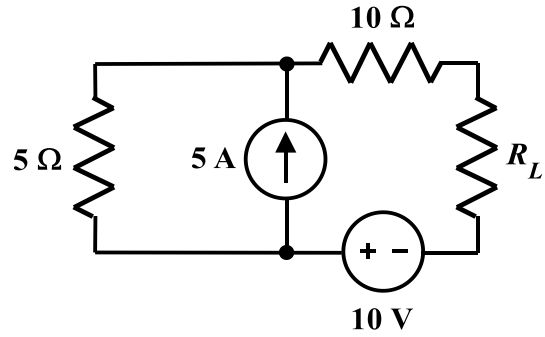
2. Determine the value of V_o .



3. Use the superposition method to determine the value of V_o .



4. For the circuit shown below:



a. What value should be chosen for R_L so that R_L will absorb maximum power?

b. If R_L is set equal to the value determined in part a, how much power will it absorb?