

CECS 211 - LAB 5

Thevenin and Norton Equivalent Circuits

NAME:

POSSIBLE POINTS: 10

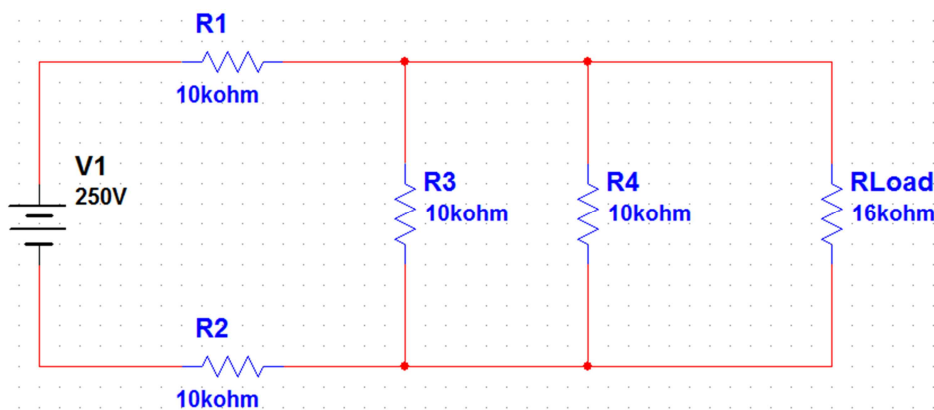
STUDENT ID:

COURSE DATE & TIME:

DIRECTIONS:

Step 1:

Using Multisim, simulate the following circuit. Measure the voltage across R_{Load} and the current through R_{Load} . Include a screenshot of your circuit with both voltage and current.



Step 2:

Calculate and draw the Thevenin equivalent circuit for the above circuit without R_{Load} . You may type the solution and include a schematic from Multisim, or you can do it by hand. Please show all the work for arriving at the Thevenin equivalent circuit.

Step 3:

Using Multisim, simulate the Thevenin equivalent circuit with R_{Load} and verify that it matches your simulation from Step 1.

Step 4:

Calculate and draw the Norton equivalent circuit for the above circuit without R_{Load} . You may type the solution and include a schematic from Multisim, or you can do it by hand. Please show all the work for arriving at the Norton equivalent circuit.

Step 5:

Using Multisim, simulate the Norton equivalent circuit with R_{Load} and show that it matches your simulation from Step 1.