FLORIDA INTERNATIONAL UNIVERSITY
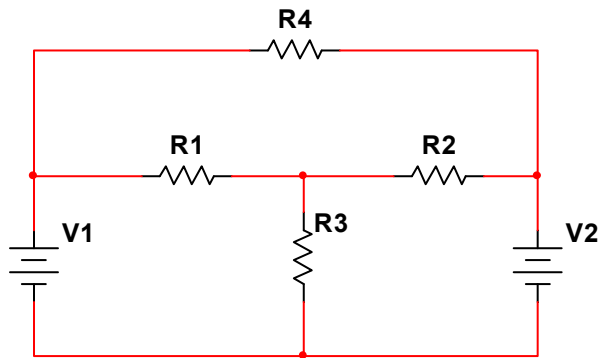## COLLEGE OF ENGINEERING AND COMPUTING
DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

EEL 3110L-CIRCUITS LAB

SECOND ACTIVITY: Introduction to Kirchhoff's Voltage Law, Kirchhoff's Current Law, Superposition, as well as do the computer simulations before or after the lab (it's recommended that you do them before).

1-Set up the following circuit.

a) $R_1 \geq 1k\Omega$
b) $R_2 \geq R_1$
c) $2.2 \text{ k}\Omega \leq R_3 \leq 10k\Omega$
d) $470\Omega \leq R_4 \leq 100 \text{ k}\Omega$
e) $2 \text{ volts} \leq V_1 \leq 7 \text{ volts}$
f) $1 \text{ volt} \leq V_2 \leq 20 \text{ volts}$

Verify Kirchhoff's Voltage Law and Kirchhoff's Current Law.

Also find the power absorbed by R_3.

Measure and tabulate all currents and voltages.

Briefly explain and comment your results.

2- Using the same circuit as above, verify the Superposition Theorem.

Measure and tabulate all currents and voltages.

Briefly explain and comment your results.

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Write a brief summary of today activities. Remember to keep your records and own comments in your lab notebook.