ECE 109L - NODE ANALYSIS - LAB 15
NODE EQUATIONS - PART I

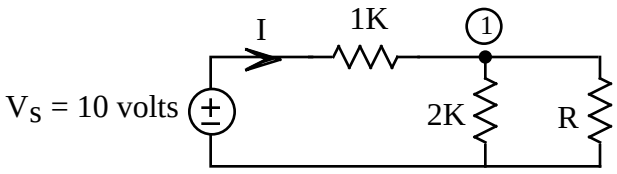
FALL 2006 **A.P. FELZER**

OBJECTIVE

The objective of this lab is to measure and calculate node voltages and then make use of the results to calculate the other voltages and currents in the circuit

LAB

1. Given the following circuit



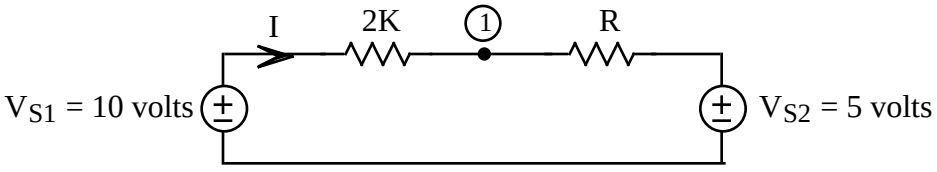
PARTNER 1: R = 1K PARTNER 2: R = 4.7K

a. Measure your resistor values. Compare with nominal values
b. Measure the node voltage V_1
c. **PreLab** - Write and solve the node equation for V_1. *Be sure to label this and all node equations as follows*

NODE	NODE EQUATION
①	

d. Compare your calculated and measured values for the node voltage V_1
e. Make use of your measured V_1 to calculate I
f. Measure I
g. Compare your calculated and measured values of I

2. Given the following circuit



PARTNER 1: R = 1K PARTNER 2: R = 4.7K

a. Measure your resistor values. Compare with nominal values
b. Measure the node voltage V_1
c. **PreLab** - Write and solve the node equation for V_1
d. Compare your calculated and measured values for the node voltage V_1
e. Make use of your measured V_1 to calculate I
f. Measure I
g. Compare your calculated and measured values of I