

Department of Electrical and Computer Engineering
University of California, Santa Barbara

ECE 2B Lab 0

OBJECTIVE

This lab will be broken into two parts. The first part will require you to show your TA that you have all of the necessary tools to complete the labs in this course and following ECE courses. Secondly, you will be required to set up a simple circuit from ECE 2A and show you TA that it functions properly. Please note the following:

- Print and bring this sheet to lab so your TA can use it as a grade sheet
- You must work by yourself so you must have your own equipment
- Any missing equipment may be purchase from the ECE Shop while the lab notebook may be purchased from the bookstore

PROCEDURE

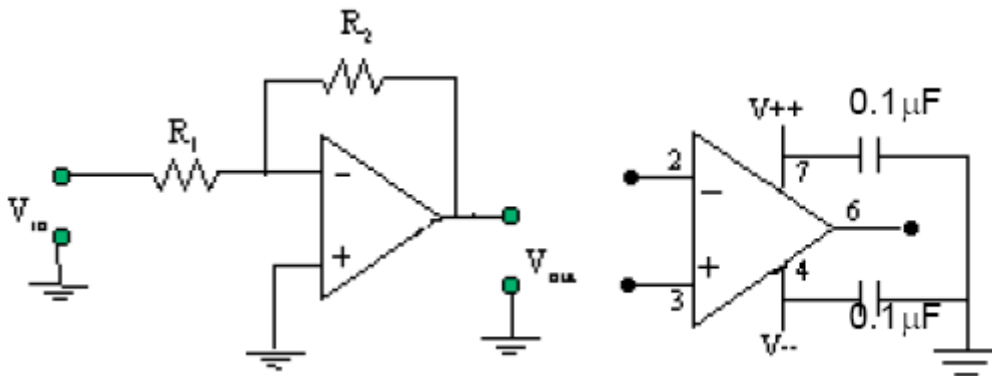
1. *Equipment Check List* Total points received ____ / 15 pts.

Show the following check list, if you are missing any component you will receive zero points.

1. Breadboard
2. 3 Scope Cables
3. 4 or more alligator clip wires
4. One set of DMM cables
5. Lab Notebook

2. *Circuit Building* Total points received ____ /10 pts.

Build the following circuit. The op-amp will be a LF351 and will be provided by the TA and the pin out diagram is shown below. Remember the op-amp should be biased with plus and minus 15 volts. R_1 is 1 k Ω and R_2 is a 10 k Ω resistor. After constructing the circuit, apply a 1 kHz 2 Volt Peak to Peak sinusoidal signal at V_{in} . Your TA will check you out when have the input and output displayed on the oscilloscope. To receive full credit the results must match the theoretical result



Total Score ____ /25 pts.