

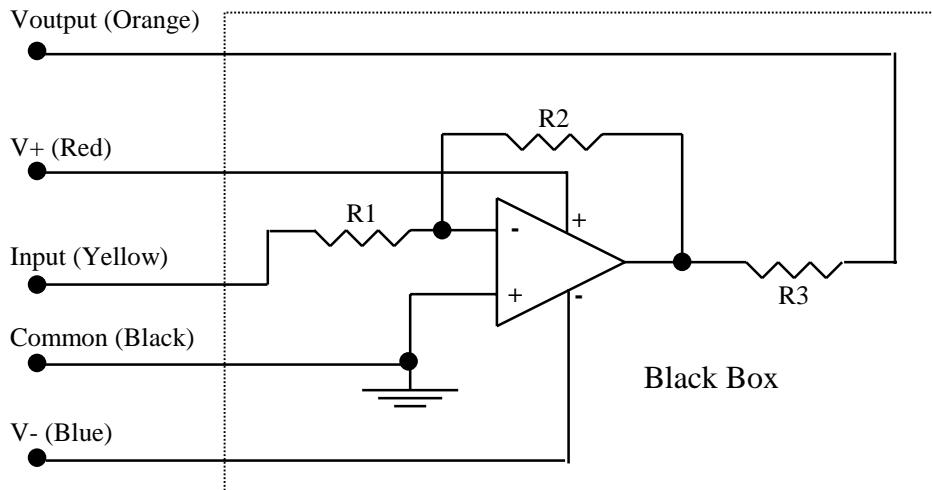
# ENSC 220 Lab Test#1

Name-1: \_\_\_\_\_

Name-2: \_\_\_\_\_

Black Box Code = \_\_\_\_\_

**Objective:** Find **R1**, **R2** and **R3** in the circuit below.



**Method:**

- 1) Record the code of your black box (above).
- 2) Connect appropriate power to the circuit.
- 3) Apply an appropriate voltage to the input.
- 4) Measure the input current and calculate **R1**.
- 5) Measure the output voltage and calculate **R2**.
- 6) Connect an appropriate load resistor to the output.
- 7) Measure the output voltage (under load) and calculate **R3**.

**Measurements**

V+	V-	V(Input)	I(Input)	V(Output)	V(Load)
V	V	V	mA	V	V

**Calculations**

R1	R2	R3
$\Omega$	$\Omega$	$\Omega$

- 8) Specify the closest 5% "preferred" values for **R1**, **R2** and **R3**.

**Closest 5% Preferred Value**

R1	R2	R3
$\Omega$	$\Omega$	$\Omega$

Record any and all calculations on the back of this page