

# PreLab Calculations/Measurements

- Verify that All Resistances lie Between  $1\text{ k}\Omega$  and  $5\text{ k}\Omega$
- Ensure that Two Resistors  $\sim 1000\ \Omega$
- Power Dissipated by Potentiometer @  $5\text{Vdc } V_{in}$ : \_\_\_\_\_
- Maximum Power Dissipated in  $R_1 R_2$  @  $5\text{Vdc } V_{in}$ : \_\_\_\_\_
- Expected Range of Output Voltages: \_\_\_\_\_

*Based on Resistor Range from  $1\text{ K}\Omega$  to  $2\text{ K}\Omega$*

- Actual Potentiometer Resistance ( $k=1$ ): \_\_\_\_\_ %Deviation \_\_\_\_\_
- Actual Potentiometer Resistance ( $k=0$ ): \_\_\_\_\_ %Deviation \_\_\_\_\_
- Find Rotation Point on Potentiometer where  $k=0.5$ , Mark with “Sharpie” Felt Tip Pen

*-- Perform Calculation to Ensure that  $\frac{1}{4}$  Watt Limit is not Exceeded for any Resistor with Any Potentiometer Setting at  $@5\text{Vdc } V_{in}$*