EECS 100/43
Lab 7 Strain Gauge Report

NAME(S):_____/SECTION____

a. TASK 1 Make sure that there is a strain gauge apparatus on your workbench. Measure the resistance of the strain gauge at rest, at the maximum pull and maximum push. Use the clamp to make sure the strain gauge is firmly seated on the bench. Record your resistance measurements in table 1.

Position	Rstrain (Ω)
Maximum Pull	
Rest	
Maximum Push	

Table 1. Rstrain values that indicate the position

b. TASK 2 Based on your measurements, pick a value for R6, R7 and R8 (R6 = R7 = R8) in your Wheatstone bridge from figure 3. Get this value checked off by the TA.

R for Wheatstone bridge: _____

c. TASK 3 Build the circuit shown in figure 3. You may have to change the values of the resistors in the op-amp circuits depending on your strain gauge.

The design criterion is that your output voltage at node 7 (V7) in figure 3 should swing from approx. -5 V to 5 V as you push and pull the strain gauge.