

EE 271-Experiment # 2: Simple Resistive Circuits

Table 1. Resistor values and percentage errors. (Circuit in Figure 1(a).)

R_1 (k Ω) (theoretical)	R_1 (k Ω) (measured)	% error in R_1	R_2 (k Ω) (theoretical)	R_2 (k Ω) (measured)	% error in R_2

Table 2. Prelab values of R_{shunt} , I_2 , I_{shunt} , and V_{out} . (Figure 1(b) circuit).

R_{shunt} (k Ω)	I_2 (mA)	I_{shunt} (mA)	V_{out} (V)
0.1			
1.0			
10.0			

Table 3. Recalculated values of I_2 , I_{shunt} , and V_{out} using actual R values.

R_1 (k Ω)	R_2 (k Ω)	R_{shunt} (k Ω)	I_2 (mA)	I_{shunt} (mA)	V_{out} (V)

Table 4. Measured values of R_{shunt} , I_2 , I_{shunt} , and V_{out} . (Figure 1(b) circuit).

R_{shunt} (k Ω)	I_2 (mA)	I_{shunt} (mA)	V_{out} (V)

Table 5. Percentage errors in measured values of I_2 , I_{shunt} , and V_{out} .

R_{shunt} (k Ω)	% error in I_2	% error in I_{shunt}	% error in V_{out}