EE 271-Experiment # 4: Electrical Circuit Theorems

Table 1. Measured V_2 values in the circuit shown in Figure 1.

V_2 (V) (V_{s1} on and V_{s2} off)	V_2 (V) (V_{s1} off and V_{s2} on)	V_2 (V) (Both V_{s1} and V_{s2} on)

Table 2. Measured V_2 values in the circuit shown in Figure 1 where the polarity of the 5 V voltage source is reversed.

V_2 (V) (V_{s1} on and V_{s2} off)	V_2 (V) (V_{s1} off and V_{s2} on)	V_2 (V) (Both V_{s1} and V_{s2} on)

Table 3. Measured values of V_{OC}, I_{SC} and V_L, and calculated value of R_T (or R_N) and P_L in the circuit shown in Figure 2.

V_{OC} (V)	I_{SC} (mA)	R_T or R_N (Ω)	V_L (V)	P_L (mW)

Table 4. Measured values of V_L and I_L, and calculated values of P_L in the circuit shown in Figure 3.

V_L (V) (no R_{ext})	V_L (V) (with R_{ext})	I_L (mA) (no R_{ext})	I_L (mA) (with R_{ext})	P_L (mW) (no R_{ext})	P_L (mW) (with R_{ext})	% P_L increase