BME 3511 Laboratory 4 Resistors in Parallel

Student Name: _____ Date Submitted:_____

Lab Partner(s):_____

Lab Procedure: Set up the follow circuits in parallel. Measure the resistances individually as well as the total resistance. Assume voltage source of 5 Volts. Calculate equivalent resistance, current, and voltage across each resistor. *Measure* and *record* the currents as indicated.

Resistors	Measured Resistance	Calculated Voltage	Calculated Current	Measured Current
R1 = 1.2 kΩ R2 = 1.2 kΩ	R1 = R2 = RTotal =	V_{R1} = V_{R2} = Total =	I_{R1} = I_{R2} = Total =	I_{R1} = I_{R2} = Total =
R1 = 1.2 kΩ R2 = 560 Ω	R1 = R2 = RTotal =	V_{R1} = V_{R2} = Total =	I_{R1} = I_{R2} = Total =	I_{R1} = I_{R2} = Total =
R1 = 680 Ω R2 = 360 Ω R3 = 1.2 kΩ	R1 = R2 = R3 = RTotal =	V_{R1} = V_{R2} = V_{R3} = Total =	I_{R1} = I_{R2} = I_{R3} = Total =	I_{R1} = I_{R2} = I_{R3} = Total =
R1 = 220 Ω R2 = 470 Ω R3 = 1.2 kΩ	R1 = R2 = R3 = RTotal =	V_{R1} = V_{R2} = V_{R3} = Total =	I_{R1} = I_{R2} = I_{R3} = Total =	I_{R1} = I_{R2} = I_{R3} = Total =
R1 = 680 Ω R2 = 15 kΩ R3 = 560 Ω	R1 = R2 = R3 = RTotal =	V_{R1} = V_{R2} = V_{R3} = Total =	I_{R1} = I_{R2} = I_{R3} = Total =	I_{R1} = I_{R2} = I_{R3} = Total =