(Reproduced below for the report. Signed copy attached**.)**

Table 1. Resistor Values

|  |  |  |
| --- | --- | --- |
|  | R1 (Ω) | R1 (Ω) |
| Stated Value | 180 | 360 |
| Measured Value | 178 | 358 |

Table 2. Measured Currents and Voltages; Calculated Resistances

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Configuration | *I*  (mA) | *I*1  (mA) | *I*2  (mA) | *V*  (*V*) | *V*1  (*V*) | *V*2  (*V*) | *R*  (Ω) | *R*1  (Ω) | *R*1  (Ω) |
| Series | 10.9 | 10.9 | 10.9 | 5.97 | 1.96 | 3.97 | 536 | 178 | 358 |
| Parallel | 43.5 | 28.6 | 14.4 | 6.04 | 6.04 | 6.04 | 119 | 178 | 358 |

**CALCULATIONS**

1. From measured values of current and voltage compute the resistances R1, R2 and R3 for both series and parallel connections. Use Ohm’s Law.

2. Compute the total resistance in the series connection using equation (1) and values of R1 and R2 computed in Step 1. Compare with the value of R.

3. Compute the total resistance in parallel connection by using equation (2) and the values of R1 and R2 computed in Step 1. Again compare with the measured value.

**RESULTS AND CONCLUSIONS**