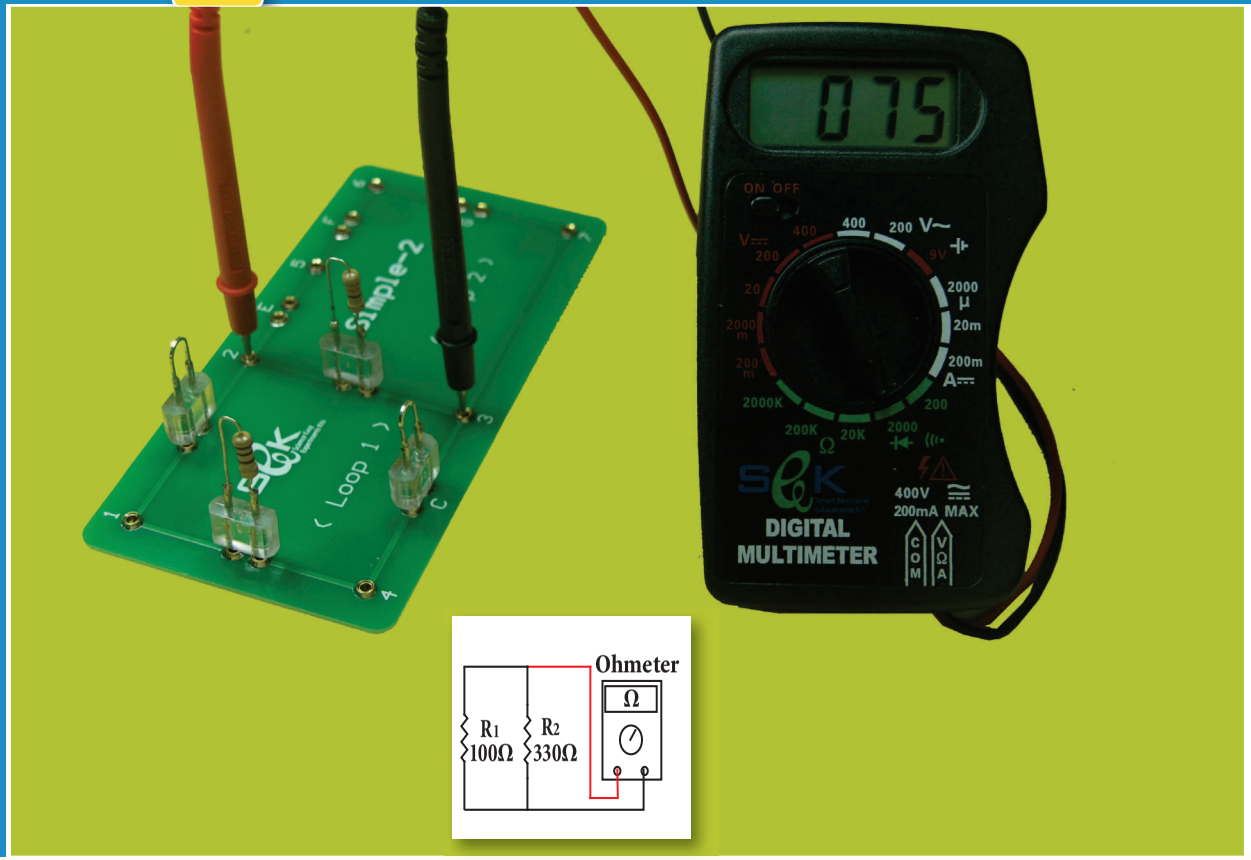
Experiment 12 Resistors in Parallel



Objectives

1. The student will connect resistors in parallel and measure their equivalent resistance.

Apparatus

- Experiments Board (Simple-2)
- DMM
- Fixed Carbon Resistors 100Ω
- Fixed Carbon Resistors 330Ω

Procedure & Conclusions

1. Insert resistor R_1 (100Ω) at the pair (D), and resistor R_2 (330Ω) at the pair (B), as shown in the photo.
2. Insert the DMM probes at points (1) & (4) to measure the resistance value of the resistor R_1.

- The measured value of R_1 is ..... ohm.

3. Insert the DMM probes at points (2) & (3) to measure the resistance value of the resistor R_2.

- The measured value of R_2 is ..... ohm.

4. Insert jumpers at the pairs (A) & (C).
5. Insert the DMM probes at points (2) & (3) or at points (1) & (4) to measure the equivalent resistance of the two resistors in parallel.

- The measured value of the equivalent resistance of the two resistors in parallel is ..... ohm.

6. Calculate the equivalent resistance using resistors in parallel formula ($1/R_T = 1/R_1 + 1/R_2$) and compare the result with the above measured value.

- The calculated value of the equivalent resistance of the two resistors in parallel is ..... ohm.