Electric circuits and Ohm’s law

Science • Grade 9 • Student worksheet

Name: _____ Date: _____

1. A 12 V supply is connected to a 6 Ω resistor. Find current.

2. A 3 A current flows through a 4 Ω resistor. Find voltage.

3. A 9 V battery supplies 0.5 A. Find resistance.

4. Resistors of 3 Ω and 7 Ω are in series. Find total resistance.

5. A 20 V supply is connected to the series circuit above. Find current.

6. Explain what happens to current if resistance doubles at constant voltage.

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Science • Grade 9 • Answer key

1. 2 A

2. 12 V

3. 18 Ω

4. 10 Ω

5. 2 A

6. Current halves.