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**Ohm's Law Word Problems**

Directions: Be sure to write the equation you used and SHOW ALL WORK!!!

1. How much current flows through a light bulb that has 7 ohms of resistance when 110 volt**s** are applied to it?

2. How much current flows through a heating element that has a resistance of 50 ohms when 230 volts are applied to it?

3. How much current flows through an electric toaster that has a resistance of 32 ohms when 120 volts are applied to it?

4. What is the resistance of a 60 Watt light bulb that allows 500 mA to flow when 120 V is applied to it?

5. What is the resistance of a heating element that allows 15 Amps to flow when 440 V is applied to it?

6. What battery voltage would cause .075 Amps to flow through a 300 ohm resistor?

7. How much voltage is required to make 15 Amps flow through a 7.5 ohm resistance?

8. A battery causes 25A to flow when it is applied to a light bulb with a resistance of 50 ohms. How much voltage would be required?

9. A 160 ohm load is connected to a 325 volt source. How much current would flow through?

10. A current of 0.5 Amps flows in a light bulb when the voltage difference between the ends of the filament is 120 V. What is the resistance of the filament?