

Directions: Place the correct answer with units in the space provided. 2 points for each question. There will be a half point deduction for no or incorrect units!

_____1. A current of 3.7 amps is running through a circuit like the one above with a resistance of 1.5 ohms. What is the voltage?

_____2. If the current in the circuit above is 10 amps and the resistance is 3 ohms, what is the voltage?

_____3. If the battery in the circuit above is 24 V and the resistance is 12 ohms, what is the current?

_____4. Given a voltage of 120 volts and a current of 5 amps, what is the resistance?

5. Given a resistance of 1500 ohms and a current on 0.03 amps, what's the voltage?

_____6. Resistance is 200 ohms and voltage is 24 V. Find I.

_____7. Battery potential is 12 volts and current is 2.7 amps. What's the resistance?

_____8. House current is 120 volts. If a light bulb runs a current of 0.5 amps, what's the resistance of the bulb?

_____9. Your car battery is a 12 V DC source. Typically you might find a fuse that can handle a 5 amp surge. What resistance is that fuse protecting?

_____10. You might have a flashlight that runs (2) D-cells of 1.5 volts each in series. The bulb is rated for 0.7 amps. Hint: Find the total voltage. What's its resistance?