Team Name: _____ **Date:** _____

Ohm's Law Math Worksheet Answers

1. A battery is connected to a light bulb in a circuit. There is a current (I) of 3 A in the light bulb. The light bulb has a resistance (R) of 0.5 Ω. What is the voltage (V) of the battery?

   Use $V = I \times R$ to solve this problem.

   1.5 Volts = 3 A x 0.5 Ω

2. A battery is connected to a light bulb in a circuit. There is a current of 2 A in the light bulb. The voltage of the battery is 1.5 V. What is the resistance of the light bulb?

   Use $R = \frac{V}{I}$ to solve this problem.

   0.75 Ω = 1.5V ÷ 2A

3. 3. A battery is connected to a light bulb in a circuit. The voltage of the battery is 1.5 V. The light bulb has a resistance of 1.5 Ω. What is the current in the light bulb?

   Use $I = \frac{V}{R}$ to solve this problem.

   1.0 A = 1.5V ÷ 1.5Ω