Ohm’s Law Math Worksheet

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.

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.

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.