

## Current Electricity Worksheet

1. An automobile headlight with a resistance of  $30\ \Omega$  is placed across a 12 volt battery. What is the current through the circuit?
2. A motor with an operating resistance of  $32\ \Omega$  is connected to a voltage source. The current in the circuit is 3.8 A. What is the voltage of the source?
3. A transistor radio uses  $2 \times 10^{-4}$  A of current when it is operated by a 3 V battery. What is the resistance of the radio circuit?
4. A lamp draws a current of 0.5 A when it is connected to a 120 V source. What is the resistance of the lamp?