

Name _____
Honors Physics
Period _____

B

Date _____
Electric Circuits WS #3H
Mrs. Nadworny

Circuit Diagrams

Directions: Use the appropriate Circuit Symbols on your Reference Tables to draw schematic diagrams of the circuits described. Solve the following problems using the GUESS method and proper significant figures. Be sure to show ALL work.

1. A circuit contains a 75.0 V battery, a switch, and a 16.3Ω light bulb. There is also an ammeter measure the current flowing through the bulb and a voltmeter measure the potential difference across the bulb.
 - a. Draw a circuit diagram using proper schematic symbols. Indicate the positive side of the battery and the direction of conventional current.

- b. Calculate the ammeter reading.

2. A circuit contains a 6.0 V cell, a resistor, an ammeter reading 85 mA flowing through the resistor and a voltmeter measure the potential difference across the cell.
 - a. Draw a circuit diagram using proper schematic symbols. Indicate the positive side of the cell the direction of conventional current.

- b. Calculate the size of the resistor.