1. List apparatus in this experiment.

2. What does each symbol represent?

3. A voltmeter is a device to measure the ______ across a resistor and an ammeter is a device to measure the______ through the resistor.

4. In Fig 1 the voltmeter is connected in _____with the resistor and the ammeter and the variable DC power source are connected in ______ with the resistor.

5. State Ohm's law in words.

6. Give the equation of Ohm's law. Explain what each variable represents and give proper SI units for each variable.
7. If the graph of voltage vs. current is obtained as shown, find the resistance.

\[
\text{slope} = \frac{y_2 - y_1}{x_2 - x_1} = \frac{0.84 \text{ V} - 0.22 \text{ V}}{0.8 \text{ A} - 0.2 \text{ A}} = 1.03 \ \Omega
\]

Resistance = slope = 1.03 \ \Omega

Below are pictures of real resistors used in electronic circuits.