## Problems



## Ohm's Law

Ohm's Law states that when the <u>temperature</u> of most metallic conductors is kept <u>constant</u>, the *current* is <u>proportional</u> to the *potential difference* across the conductor.

 $I \propto V$ 

A material is considered **ohmic** if it behaves according to Ohm's law. A graph of *I* versus *V* gives a straight line through the origin. Materials that have constant *resistance* are <u>ohmic</u>, while materials that do not have constant *resistance* are not <u>ohmic</u>.



## Circuit Problems

- 1) Find total or equivalent resistance
- 2) Find total current drawn from power supply
- 3) Find 'voltage drop' across each resistor
- 4) Find current through each resistor

