

4. Ohm's Law gives the relationship between potential difference, current, and resistance as

$$\Delta V = I R$$

If we multiply both sides of the equation by  $I$  we can solve for  $R$ .

$$R = \Delta V / I$$

$$P = (9.0 \text{ V}) / (2.0 \text{ A}) = 4.5 \text{ } \Omega$$