

Ohm's Law

Practice Problems

$$\begin{array}{ll} \textcircled{1} I = 4.7 \text{ A} & V = I \times R \\ R = 26 \Omega & V = (4.7 \text{ A}) \times (26 \Omega) \\ V = ? & V = 122.2 \text{ V} \end{array}$$

The voltage is 122.2 V

$$\begin{array}{ll} \textcircled{2} I = 0.5 \text{ A} & V = I \times R \\ R = 15 \Omega & V = (0.5 \text{ A}) \times (15 \Omega) \\ V = ? & V = 7.5 \text{ V} \end{array}$$

The voltage is 7.5 V.

$$\begin{array}{ll} \textcircled{3} R = 12 \Omega & V = I \times R \\ I = 0.7 \text{ A} & V = (0.7 \text{ A}) \times (12 \Omega) \\ V = ? & V = 8.4 \text{ V} \end{array}$$

The voltage is 8.4 V.

$$\begin{array}{ll} \textcircled{4} V = 120 \text{ V} & I = V \div R \\ R = 34 \Omega & I = (120 \text{ V}) \div (34 \Omega) \\ I = ? & I = 3.53 \text{ A} \end{array}$$

The current is 3.53 A.

$$\begin{array}{ll} \textcircled{5} R = 24 \Omega & I = V \div R \\ V = 110 \text{ V} & I = (110 \text{ V}) \div (24 \Omega) \\ I = ? & I = 4.58 \text{ A} \end{array}$$

The current is 4.58 A.

$$\begin{array}{ll} \textcircled{6} V = 115V & R = V \div I \\ I = 1.2A & R = (115V) \div (1.2A) \\ R = ? & R = 95.8 \Omega \end{array}$$

The resistance is 95.8Ω .

$$\begin{array}{ll} \textcircled{7} I = 0.8A & R = V \div I \\ V = 130V & R = 130V \div 0.8A \\ R = ? & R = 162.5 \Omega \end{array}$$

The resistance is 162.5Ω .