

# Ohms Law

## To Determine an Unknown Voltage: $E = I \times R$

E = Volts

I = Current, Amps

R = Resistance, Ohms

*Example: .25 Amps (I) x 96 Ohms (R) = 24 Volts (E)*

## To Determine an Unknown Current: $I = P / E$

E = Volts

I = Current, Amps

P = Power, Watts

*Example: 6 Watts (P) ÷ 24 Volts (E) = .25 Amps (I)*

## To Determine an Unknown Current: $I = E / R$

E = Volts

I = Current, Amps

R = Resistance, Ohms

*Example: 24 Volts (E) ÷ 96 Ohms (R) = .25 Amps (I)*

## To Determine an Unknown Wattage: $P = E \times I$

E = Volts

I = Current, Amps

P = Power, Watts

*Example: 24 Volts (E) x .25 Amps (I) = 6 Watts (P)*

## To Determine an Unknown Resistance: $R = E / I$

E = Volts

I = Current, Amps

R = Resistance, Ohms

*Example: 24 Volts (E) ÷ .25 Amps (I) = 96 Ohms (R)*