R = Resistance in Ohms

I = Current in Amperes

P = Power in Watts

E = Electromotive Force in Volts

Cover the value you need then view the formula. Covering the "R" shows E over I, or E divided by I, which does equal R.

T5C08 What is the formula used to calculate electrical power in a DC circuit?
Power (P) equals voltage (E) multiplied by current (I)

T5C09 How much power is being used in a circuit when the applied voltage is 13.8 volts DC and the current is 10 amperes?
138 watts

T5C10 How much power is being used in a circuit when the applied voltage is 12 volts DC and the current is 2.5 amperes?
30 watts

T5C11 How many amperes are flowing in a circuit when the applied voltage is 12 volts DC and the load is 120 watts?
10 amperes

T5D01 What formula is used to calculate current in a circuit?
Current (I) equals voltage (E) divided by resistance (R)

T5D02 What formula is used to calculate voltage in a circuit?
Voltage (E) equals current (I) multiplied by resistance (R)

T5D03 What formula is used to calculate resistance in a circuit?
Resistance (R) equals voltage (E) divided by current (I)

T5D04 What is the resistance of a circuit in which a current of 3 amperes flows through a resistor connected to 90 volts?
30 ohms

T5D05 What is the resistance in a circuit for which the applied voltage is 12 volts and the current flow is 1.5 amperes?
8 ohms

T5D06 What is the resistance of a circuit that draws 4 amperes from a 12-volt source?
3 ohms

T5D07 What is the current flow in a circuit with an applied voltage of 120 volts and a resistance of 80 ohms?
1.5 amperes

T5D08 What is the current flowing through a 100-ohm resistor connected across 200 volts?
2 amperes

T5D09 What is the current flowing through a 24-ohm resistor connected across 240 volts?
10 amperes

T5D10 What is the voltage across a 2-ohm resistor if a current of 0.5 amperes flows through it?
1 volt

T5D11 What is the voltage across a 10-ohm resistor if a current of 1 ampere flows through it?
10 volts

T5D12 What is the voltage across a 10-ohm resistor if a current of 2 amperes flows through it?
20 volts