**Electrical Theory / Ohm's Law Quiz** **Name _____**

1. Another way of describing electromotive force (EMF) is the ____ of a circuit.

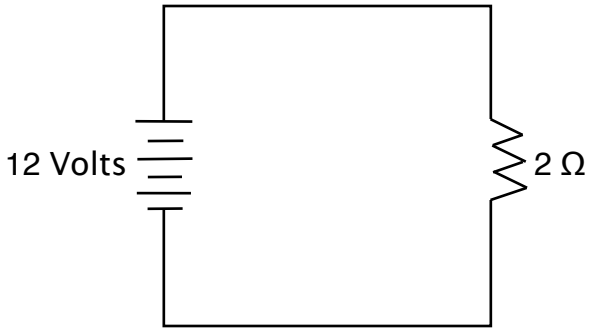
(a) voltage
(b) root mean square (rms)
(c) potential difference
(d) any of these

2. A way of describing the flow of electrons in a circuit is _____.

(a) voltage
(b) current
(c) power
(d) resistance

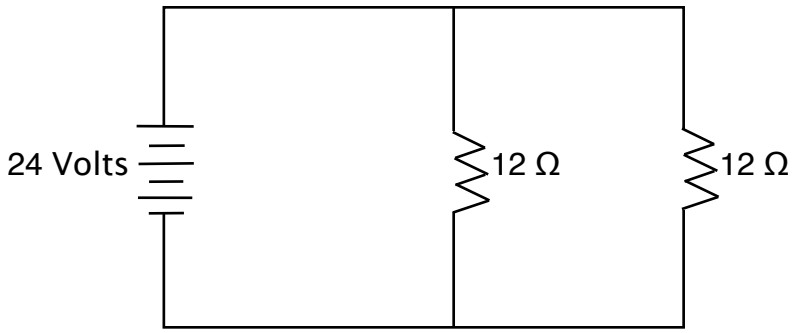
3. Conductor resistance varies with which of the following ?

(a) material
(b) voltage
(c) current
(d) power




4. The total current consumed in the circuit above equals _____ amps.

(a) 72
(b) 12
(c) 6
(d) 2

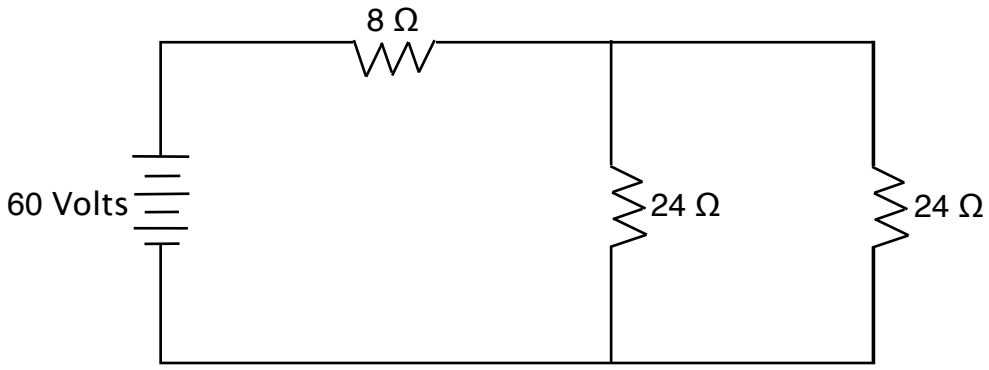



5. The total wattage consumed in the circuit above equals _____ watts.

(a) 96
(b) 24
(c) 6
(d) 4


6. The above circuit feeds a kitchen. The current passing through the circuit is _____ amps.

(a) 183
(b) 18.3
(c) 13.3
(d) 5




7. The wattage consumed at the 8Ω resistor circuit above equals _____ volts.

(a) 180
(b) 108
(c) 72
(d) 60

8. If a blender is plugged into a 120 volt outlet that supplies 2.7 amps of current what amount of power (watts) is used by the blender ?

(a) 324
(b) 240
(c) 120
(d) 44.4

9. A 720 watt heater is rated at 240 volts, what would the wattage be if it was connected to a 230 volt source ?

(a) 720
(b) 691
(c) 661
(d) 80

10. What current flows through a hair dryer plugged into a 120 volt circuit with a resistance of 25 ohm's ?

(a) 576
(b) 528
(c) 120
(d) 4.8