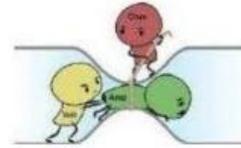# Ohm's Law
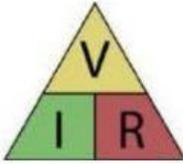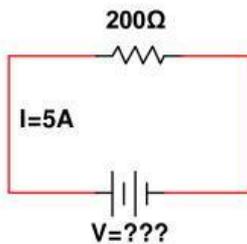
**Choose the best answer.**

1. What is the formula to find current?

   A. I = V x R   B. I = R/V   C. I = V/R

2. What is the formula to find voltage?

   A. V = I/R   B. V = R/I   C. V = I x R

3. What is the formula to find resistance?

   A. R = V/I   B. R = I/V   C. R = I x V

4. If current I = 5A and resistance R = 200Ω, find the voltage V.

   A. V = 120 volts   B. V = 1,000 volts   C. V = 100 volts   D. V = 40 volts

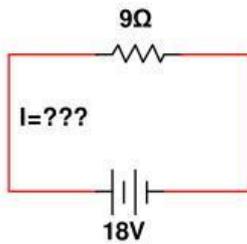5. If voltage V = 6 volts and current I = 2A, find the resistance R.

   A. R = 3 Ω   B. R = 6 Ω   C. R = 75 Ω   D. R = 1/3 Ω
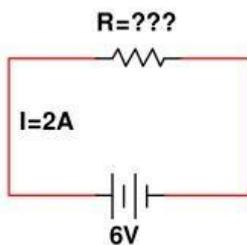
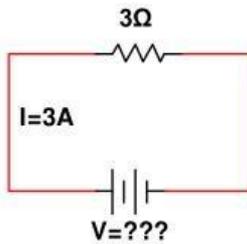6. If voltage V = 12 volts and resistance R = 470Ω, find the current I.
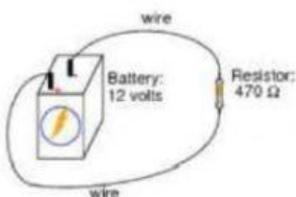
   A. I = 3 A   B. I = 0.12 A   C. I = 0.026 A   D. I = 0.5 A

7. If an 18-volt battery supplies a 9Ω resistor, find the current I.
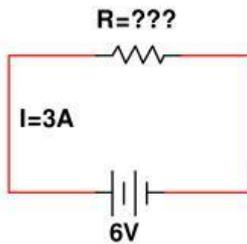
9Ω

I=???

18V

A. I = 162 A   B. I = 1/2 A   C. I = 3 A   D. I = 2 A

8. Find the voltage V of a battery that supplies 3A current to a resistor R = 3Ω.

3Ω

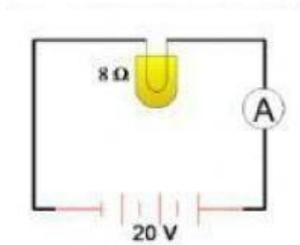I=3A

V=???

A. V = 1 volt   B. V = 9 volts   C. V = 10 volts   D. V = 6 volts

9. If voltage V = 6 volts and current I = 3A, find the resistance R.

R=???

I=3A

6V

A. R = 2 Ω   B. R = 3 Ω   C. R = 0.5 Ω   D. R = 18 Ω

10. How much current does the ammeter show in the circuit below?

8 Ω   A

20 V

A. I = 160 A   B. I = 25 A   C. I = 4 A   D. I = 2.5 A