

Ohm's Law Practice Problems

Using Ohm's Law, solve the following problems. Be sure to show all work. **Formula: V (voltage) = I (current) $\times$ R (resistance)**

1. What is the voltage if a resistance of $25\ \Omega$ produces a current of 250 amperes?

2. What is the current produced by a voltage of 240 V through a resistance of $0.2\ \Omega$?

3. What voltage is necessary to produce a current of 200 amperes through a resistance of $100\ \Omega$?

4. What resistance would produce a current of 120 amps from a 6-V battery?

5. What is the current produced by a 9-V battery flowing through a resistance of $200\ \Omega$?

6. What voltage produces a current of 500 amps with a resistance of $50\ \Omega$?

7. What resistance would produce a current of 200 amps with a voltage of 2,000 V?

8. What is the current produced with a 9-V battery through a resistance of $100\ \Omega$?