

Name _____ Period _____ Date _____

Ohm's Law Worksheet

1. What is the current in a 10V circuit if the resistance is 2Ω ?
2. What is the current in a 120V circuit if the resistance 20Ω ?
3. What is the current in a 120V circuit if the resistance 10Ω ?
4. What is the current in a 120V circuit if the resistance 5Ω ?
5. Based on questions 2, 3, and 4, what happens to the current in a circuit as the resistance decreases? Increases?
6. What voltage is required to move 2A through 5Ω ?
7. What voltage is required to move 2A through 10Ω ?
8. What voltage is required to move 2A through 20Ω ?

9. Based on questions 6, 7, and 8, what happens to the voltage required in a circuit as the resistance decreases? Increases?

10. What is the resistance of a circuit with 20V and 2A?

11. What is the resistance of a circuit with 120V and 1A?

12. What is the resistance of a circuit with 120V and 10A?

13. What is the resistance of a circuit with 120V and 4A?

14. What is the resistance of a circuit with 120V and 30A?

15. What is the current in a 12V circuit if the resistance is 2Ω ?

16. What is the current in a 20V circuit if the resistance is 10Ω ?

17. What is the resistance of a circuit with 120V and 5A?