

Ohm's Law Word Drills

Determine the unknown in each of the following:

- 1 A device is connected to a 197 V source and has a known resistance of 32 ohm.
What current will this device draw?
- 2 Determine the voltage needed for a 930 mA current that meets 43 ohm of resistance.
- 3 Determine the voltage needed for a 7.563 A current that meets 32 ohm of resistance.
- 4 Determine the voltage needed for a 2.461 A current that meets 76 ohm of resistance.
- 5 A device is connected to a 105 V source and has a known resistance of 76 ohm.
What current will this device draw?
- 6 What is the resistance of a device that draws 1.875 A from a 15 V source?
- 7 Determine the voltage needed for a 1.302 A current that meets 53 ohm of resistance.
- 8 A device is connected to a 198 V source and has a known resistance of 74 ohm.
What current will this device draw?
- 9 Determine the voltage needed for a 11.125 A current that meets 16 ohm of resistance.
- 10 A device is connected to a 72 V source and has a known resistance of 5 ohm. What current will this device draw?
- 11 What is the resistance of a device that draws 952 mA from a 59 V source?
- 12 Determine the voltage needed for a 1.754 A current that meets 61 ohm of resistance.
- 13 What is the resistance of a device that draws 7.375 A from a 118 V source?
- 14 A device is connected to a 204 V source and has a known resistance of 73 ohm.
What current will this device draw?
- 15 What is the resistance of a device that draws 2.486 A from a 179 V source?

Answers

1. $I = 6.156 \text{ A}$ 2. $V = 40 \text{ V}$ 3. $V = 242 \text{ V}$ 4. $V = 187 \text{ V}$ 5. $I = 1.382 \text{ A}$ 6. $R = 8 \text{ ohm}$ 7. $V = 69 \text{ V}$ 8. $I = 2.676 \text{ A}$ 9. $V = 178 \text{ V}$
10. $I = 14.4 \text{ A}$ 11. $R = 62 \text{ ohm}$ 12. $V = 107 \text{ V}$ 13. $R = 16 \text{ ohm}$ 14. $I = 2.795 \text{ A}$ 15. $R = 72 \text{ ohm}$