

WORKSHEET ELECTRICAL POWER

1. How much power flows through a circuit with 1 amp and 120 volts?
2. How much power flows through a circuit with 5 amps and 120 volts?
3. How much power flows through a circuit with 10 amps and 120 volts?
4. What happens to the power in a circuit as the current increases?
5. How much power flows through a circuit with 10 amp and 10 volts?
6. How much power flows through a circuit with 10 amps and 20 volts?
7. How much power flows through a circuit with 10 amps and 40 volts?
8. What happens to the power in a circuit as the voltage increases?
9. How many amps are required for a 2000W blow dryer operating on 110 volts?
10. How many amps are required for 100W light bulb operate on 110 volts?
11. Joe has a 1500W air conditioner on the same circuit as 2X100 watt light bulbs and a 500W stereo. If the 110 volt circuit has a twenty amp fuse, will the circuit work?
12. The power point in Sarah's new SUV, is rated at 12V and 10A. Can she plug a 150W portable DC refrigerator into the power point?
13. What size of fuse will Jesus need in a circuit to support a 150W amplifier operating at 12V?
14. What is the power requirement for a 40A, 240 volt motor?
15. What is the power required to raise a 100kg rock 10m high in ten seconds?
16. How much current does 110V garage door opener use if it can raise 40kg door 3m high in five seconds?