1. Six 100 watt 120 volt lamps are connected in parallel to a 120 volt source. What is the total resistance?

Use the worksheet on page 52 to show given/formula/substitution/solution.

2. Eight 8 ohm resistors are wired in parallel with eight 6 ohm resistors. What is the resistance total?

Use the worksheet on page 52 to show given/formula/substitution/solution.

3. When a 1600 watt 240 volt toaster and an 1800 watt 240 volt fry pan are connected in parallel to a 240 volt source, what is the total current flow?

Use the worksheet on page 52 to show given/formula/substitution/solution.

4. A 200 watt soldering iron is plugged into a 120 volt duplex receptacle with a 600 watt trouble lite. How many amps are available for use if the circuit is protected by a 20 amp single pole circuit breaker?

Use the worksheet on page 52 to show given/formula/substitution/solution.

5. What is the expected voltage for ten resistors in parallel (6, 8, 10, 12, 14, 16, 18, 20, 22, 24 ohms) if the current flow through the 6 ohm resistor is 6 amps?

Use the worksheet on page 53 to show given/formula/substitution/solution.

6. Calculate the total wattage of the following 12 volt loads connected in parallel: 6 ohm, 10 ohm, 12 ohm, and 14 ohm.

Use the worksheet on page 53 to show given/formula/substitution/solution.

7. What is the total resistance of a parallel circuit with 26 equal resistors of 120 ohms each?

Use the worksheet on page 53 to show given/formula/substitution/solution.

8. What is the total voltage of a parallel circuit where component #3 is .833 amps at 100 watts?

Use the worksheet on page 53 to show given/formula/substitution/solution.