Ohm’s Law and Power Equation Practice Worksheet

1. If a blender is plugged into a 110 V outlet that supplies 2.7 A of current, what amount of power is used by the blender?
2. If a clock expends 2 W of power from a 1.5 V battery, what amount of current is supplying the clock?
3. Tommy runs his juicer every morning. The juicer uses 90 W of Power and the current supplied is 4.5 A. How many volts are necessary to run the juicer?
4. Amanda’s hair dryer requires 11A of current from a 110 V outlet. How much power does it use?
5. A DC electric motor transforms 1.50 kW of electrical power into mechanical form. If the motor's operating voltage is 300 volts, how much current does it "draw" when operating at full load (full power output)?

**Challenge**

Calculate the amount of power dissipated by this electric heating element, if the generator's output voltage is 110 volts and the heater's resistance is 2.5 ohms

Now, calculate the power dissipated by the same heater if the generator's output voltage is doubled.