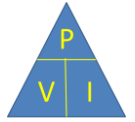


Skills Exploration 11/12

Watt's Law Assignment

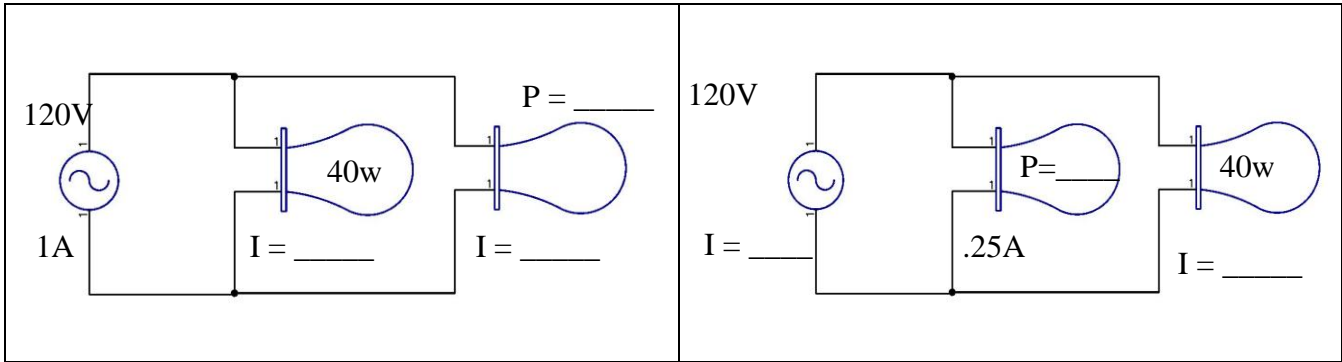
Name: _____

Mark /25



Calculate the missing values for voltage, current or Watts using Watt's Law ($P = V \times I$)

| | |
|--|---|
| <p>120V 2A P = _____</p> | <p>120V 120W I = _____</p> |
| <p>V = _____ 5A P = 100W</p> | <p>120V I = _____ P = 60W</p> |
| <p>120V 1.5A P = _____</p> | <p>120V I = _____ 60W 60W</p> |
| <p>120V I = _____ 60W 1A P = _____</p> | <p>120V 3A I = 3A P = _____ 1A 120W</p> |



Answer the following Power/Current questions about the different loads in the room. The **Voltage** in the room is **120V**

- 1) What is the maximum wattage and voltage of the microwave?

- 2) Total up the **maximum** amount of current the 6 scroll saws draw.

- 3) What voltage is the green Hitachi mitre saw running at? What is the maximum current draw in Amps?

- 4) What voltage is the General drill press running at? How much current (amps) will it use?

- 5) The florescent lights in the room are 30watts each. When all the lights are on...
 What is the total wattage of them all?
 What is the total current being used?