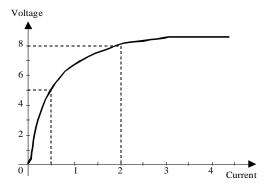
Power Worksheet

- 1. What is the potential difference when a microwave runs on 1.2 A and uses 300 W of power?
- 2. You have 40 W, 60W and 90 W light bulbs. If you wanted to have the most light possible in your room, which light bulb would you use? Explain why.
- 3. It is November and all the leaves are falling. You go to the store to buy a leaf blower. Cost is irrelevant as long as you get the leaf blower that will do the job the fastest. You have two choices:

Leaf blower 1 uses 120 V and 1.5 A Leaf blower 2 uses 120 V and 4.5 A Which one should you choose and explain why?

4. The following graph shows the variation of the voltage across the terminals of a ceramic element as a function of the intensity of the current passing through it.



What power is dissipated when this ceramic element is connected to a voltage of 5.0 V?

A) 20 W

B) 10.0 W

C) 5.0 W

D) 2.5 W

- 5. A domestic power supply of 110 V is protected by a 25 A fuse. How many light bulbs with specifications 110 V 150 W, can be installed in one circuit without blowing the fuse?
- A) 24
- B) 18
- C) 12
- D) 6