

REVIEW QUESTIONS

Chapter 8

1. What is the resistance of a lamp operating at 115 volts and using 0.25 amp of current?
2. How much power does a heater have if it uses 5 amps of current at 120 volts?
3. Three resistors of 5, 10, and 15 ohms are connected in a series circuit to a 9-volt battery. What is the current through the circuit?
4. Describe two differences in operation of a series and a parallel circuit.

5. Two lamps with resistances of 10 and 15 ohms are connected in a parallel circuit to a 12-volt battery.

a) What is the total resistance of the circuit?

b) What is the current in the circuit?

6. Describe two ways that a nail can become magnetized.

7. Complete each statement below with a suitable word or phrase:

A) Similar charges \_\_\_\_\_ and opposite charges \_\_\_\_\_ each other.

B) Substances that do not allow flow of electrons are called \_\_\_\_\_.

Give 2 examples of these substances: \_\_\_\_\_

C) The opposition to flow of electrons in a material is called \_\_\_\_\_  
and is measured in units of \_\_\_\_\_.

D) The electric force between two charges is affected by the \_\_\_\_\_ and  
\_\_\_\_\_ between them.

E) The flow of charges is called \_\_\_\_\_ and is measured in units of

\_\_\_\_\_