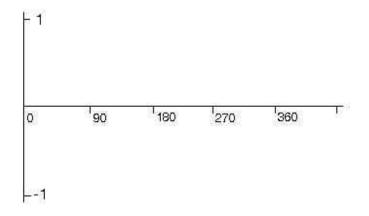
## **Electrical Design Quiz 1**

1. The voltage is 115 and the current is 10 amps. What is the resistance?

2. What is the total resistance in a series circuit if the three resistors are 10, 25 and 50 ohms?

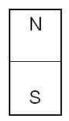
3. If there are two resistors in parallel, and both of them are 100 ohms, what is the total resistance?

4. Draw a sine wave.



## Electrical Design Quiz 1

5. Draw the lines of the magnetic flux flowing around the magnet. Show direction of flow.



- 6. In a parallel circuit, there are three resistors, a 10 ohm, a 20 ohm and a 40 ohm. What is the total resistance? What is the current if the voltage is 6 Vdc?
- 7. Name three good conducting materials.
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - C. \_\_\_\_\_
- 8. Name three good insulating materials.
  - а. \_\_\_\_\_
  - b. \_\_\_\_\_
  - C. \_\_\_\_\_
- 9. The unit of measurement for each of the following:

| EMF        |          |  |
|------------|----------|--|
| Current    |          |  |
| Resistance | <i>;</i> |  |

10. The power is \_\_\_\_\_\_, if the voltage is 480 VAC and the current is 20 amps.