

Chapter 1: Language of Electricity

TRUE/FALSE

1. Electrical symbols are a way to convey meaning while conserving space on a drawing.

ANS: T PTS: 1 REF: 2

2. There is one accepted symbol for a fuse.

ANS: F PTS: 1 REF: 2

3. Switch symbols are sometimes combined so that a more complex switch can be represented.

ANS: T PTS: 1 REF: 2

4. Electrical drawings are typically drawn with all components energized.

ANS: F PTS: 1 REF: 6

5. Scientific notation uses increments of 1000 as well as word abbreviations to make large and small numbers less confusing.

ANS: F PTS: 1 REF: 12

6. In a schematic diagram, the load is typically located opposite the power source.

ANS: T PTS: 1 REF: 10 | 12

MULTIPLE CHOICE

1. What does a flat horizontal line used with the symbol for motors and generators indicate?

a. AC c. energized
b. DC d. de-energized

ANS: B PTS: 1 REF: 3-4

2. Architectural symbols can convey the number of electrical ____ necessary for proper operation of a device or piece of equipment.

a. switches c. connectors
b. gates d. conductors

ANS: D PTS: 1 REF: 6

3. What type of electrical drawing is most often used to trace the flow of power through the drawing?

a. pictorial diagram c. architectural drawing
b. single-line drawing d. ladder diagram

ANS: B PTS: 1 REF: 8

4. A pictorial diagram is also called a(n) ____ diagram.

a. ladder c. architectural
b. component d. wiring

ANS: D PTS: 1 REF: 8

5. A(n) ____ diagram shows the relative, physical location of the components, wires, and termination points.
- a. schematic
 - b. ladder
 - c. pictorial
 - d. architectural

ANS: C PTS: 1 REF: 8

6. What type of drawing shows the actual electrical connections, but not the actual physical location of components?
- a. single-line drawing
 - b. architectural drawing
 - c. schematic diagram
 - d. pictorial diagram

ANS: C PTS: 1 REF: 9

7. In a ladder diagram, where is the first component to operate usually located?
- a. at the top
 - b. to the right
 - c. at the bottom
 - d. to the left

ANS: A PTS: 1 REF: 12

8. One type of architectural drawing is the ____.
- a. ladder diagram
 - b. floor plan
 - c. pictorial diagram
 - d. wiring diagram

ANS: B PTS: 1 REF: 12

9. What is the correct way to write the number 3,404,655 using scientific notation?
- a. 3.404655×10^6
 - b. 34.04655×10^7
 - c. 3.404655×10^3
 - d. 3.404655×10^{-6}

ANS: A PTS: 1 REF: 15

10. In engineering notation, 10^6 is called ____.
- a. kilo
 - b. nano
 - c. tera
 - d. mega

ANS: D PTS: 1 REF: 15