

Chapter 1: Introduction to Contemporary Drafting

TRUE/FALSE

1. Prehistoric people drew crude drawings long before people were able to write.

ANS: T PTS: 1

2. Language is more effective than drawings for describing the precise shape, size, and form of objects.

ANS: F PTS: 1

3. Only complex manufactured products require technical working drawings.

ANS: F PTS: 1

4. Complex manufactured products may require hundreds of working drawings.

ANS: T PTS: 1

5. Regardless of level of responsibility or the drafting specialization, all drafters must be proficient with computer-aided drafting and design systems.

ANS: T PTS: 1

6. Contemporary drafters are not typically required to have manual drafting instrument skills as all technical drawings are now prepared on computers.

ANS: F PTS: 1

7. Nearly every phase of the design process requires some degree of freehand sketching, manual drafting, and CAD for the development of ideas and working drawings.

ANS: T PTS: 1

8. A developmental engineer plans the research to develop new and improved industrial chemicals for manufacturing processes and production procedures.

ANS: F PTS: 1

9. A schematic drawing might use symbols and lines to show the flow of fluids.

ANS: T PTS: 1

10. Molecular engineers often research and develop products for the medical field.

ANS: T PTS: 1

MULTIPLE CHOICE

1. What is the basic technical form for visual communication?
- drafting

- b. scripting
- c. scaling
- d. discussing

ANS: A PTS: 1

2. What organization establishes the standardized symbols used in technical drawings?
- a. American Society of Mechanical Engineers (ASME)
 - b. International Drafting Association (IDA)
 - c. Contemporary Drafting/Design Commission (CDDC)
 - d. International Order of Architects and Engineers (IOAE)

ANS: A PTS: 1

3. Which of these historical buildings was built first?
- a. Parthenon
 - b. Egyptian pyramid
 - c. Roman Coliseum
 - d. Vatican

ANS: B PTS: 1

4. When were two-dimensional working drawings first used to produce products?
- a. thirty-sixth century BC
 - b. first century AD
 - c. fifteenth century AD
 - d. eighteenth century AD

ANS: C PTS: 1

5. What is the most basic entry level position in contemporary drafting?
- a. architect
 - b. tool designer
 - c. tracer
 - d. junior detailer

ANS: C PTS: 1

6. A _____ makes reproductions of working drawings on various types of equipment, such as copy machines and cameras.
- a. junior detailer
 - b. junior drafter
 - c. CAD operator
 - d. printing operator

ANS: D PTS: 1

7. How many surfaces are typically shown in a pictorial drawing?
- a. one
 - b. two
 - c. three
 - d. four

ANS: C PTS: 1

8. A(n) _____ does the planning and drawing for all types of maps.

- a. cartographer
- b. astronautical engineer
- c. civil engineer
- d. environmental engineer

ANS: A PTS: 1

9. An instructor of engineering is considered a(n):

- a. intern-level drafter
- b. midlevel drafter
- c. top-level professional
- d. semi-professional

ANS: C PTS: 1

10. Which type of drawing shows an object as in a photograph?

- a. schematic drawing
- b. pictorial drawing
- c. block diagram
- d. multiview drawing

ANS: B PTS: 1

11. Whose job is it to verify that the drafters' working drawings are properly drawn and free of errors?

- a. senior drafter
- b. senior detailer
- c. design technician
- d. checker

ANS: D PTS: 1

12. What does a technical illustrator do?

- a. prepare attractive illustrations for magazines, books, and posters
- b. create 3D drawings from working drawings
- c. produce complex working drawings needed for manufacture
- d. supervise the drafting personnel

ANS: B PTS: 1

13. Which drawing professionals are required to have a college degree such as a BA, MA, or PhD?

- a. midlevel drafters
- b. top-level drafters
- c. midlevel drafters and top-level drafters
- d. intern-level drafters, midlevel drafters, and top-level drafters

ANS: B PTS: 1

14. Which type of professional would be called upon to design a computer system for an automobile?

- a. aeronautical engineer
- b. industrial designer
- c. nanotechnology engineer
- d. electronics engineer

ANS: D PTS: 1

15. Which statement about multiview drawings is correct?

- a. They show the flow of a working process.
- b. They show the flow of energy.
- c. They show the complete shape of the item with its dimensions.
- d. They show 3D views of the object drawn.

ANS: C PTS: 1

16. A _____ would be used to show the flow of data through a computer network.
- a. schematic drawing
 - b. multiview drawing
 - c. pictorial drawing
 - d. block diagram

ANS: D PTS: 1

17. What is the third step in the design process?
- a. conceptual design reviews and analysis
 - b. layout and development drawings
 - c. proposal of concept
 - d. scientific investigation

ANS: C PTS: 1

18. What is the next step in the design process, after performing the final design review?
- a. detail design drawings
 - b. manufacturing
 - c. component testing of the prototype
 - d. assembly

ANS: A PTS: 1

19. Which step in the design process comes immediately before manufacturing?
- a. detail design drawings
 - b. final design review
 - c. assembly
 - d. quality assurance

ANS: D PTS: 1

20. Imagine that you are going through the design process and have reached the component testing of the prototype phase. Which of the following steps should you have already completed at this point?
- a. detail design drawings
 - b. final design review
 - c. conceptual design reviews and analysis
 - d. assembly

ANS: C PTS: 1