

Section 5: Sample Questions and Answer Key

Study Guide Questions

Below, and on the pages that follow, are sample questions. These exact questions will NOT appear on the test, and how well you perform on these questions is not necessarily a sign of how you will do on the official test. However, the sample questions WILL help provide an idea of what types of questions are asked on the test and how they are generally written. For each question below, circle the answer you think is correct and then check your work with the answer key provided.

1. When working with tools and machines, _____ is/are always required.
 - A. supervision
 - B. personal protective equipment
 - C. certification
 - D. steel-toed boots

2. Which of the following is the proper name of the tool used to measure length in drafting?
 - A. compass
 - B. protractor
 - C. ruler
 - D. scale

3. An ANSI B sheet of drawing paper is
 - A. 8.5 inches by 11 inches
 - B. 11 inches by 17 inches
 - C. 17 inches by 22 inches
 - D. 22 inches by 34 inches

4. A drawing that is made one-half the actual size of the part is _____ scale.
 - A. 1:1
 - B. 1:2
 - C. 1:4
 - D. 2:2

5. When placing a local note the lettering should be
 - A. in upper case
 - B. bold
 - C. in lower case
 - D. italics

6. The three traditional views shown in 2-dimensional multiview drawings are front, top, and
 - A. isometric
 - B. right side
 - C. auxiliary
 - D. left side

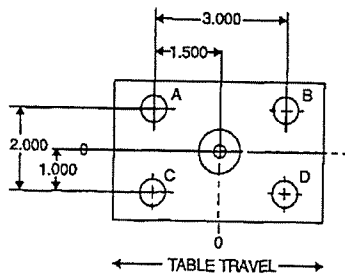
7. Perspective and axonometric are two types of _____ drawings.

- A. pictorial
- B. lithographic
- C. assembly
- D. oblique

8. Which of the following types of drawings utilizes vanishing points?

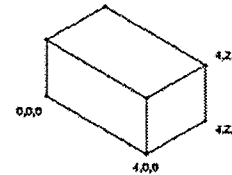
- A. isometric
- B. perspective
- C. oblique
- D. axonometric

9. The absolute coordinates of Hole A are



- A. X -3.000; Y -2.000
- B. X -1.500; Y 1.000
- C. X 1.500; Y -1.000
- D. X 3.000; Y 2.000

10. What is the total surface area of the object shown below (including visible and non visible sides)?

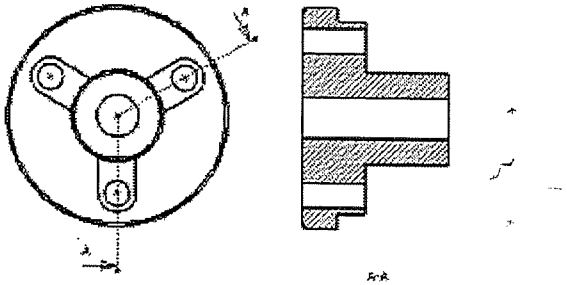


- A. 24
- B. 32
- C. 40
- D. 54

11. On a drawing with a scale of 1 inch equals 20 feet, a line _____ inches represents 45 feet.

- A. 1.27
- B. 1.45
- C. 2.25
- D. 2.85

12. Which of the following sections is shown below?



- A. aligned
- B. broken-out
- C. offset
- D. revolved

13. Which of the following commands allows the designer to create a curved solid from a 2-dimensional circle by sweeping it around an axis?

- A. array
- B. trim
- C. revolve
- D. drawing limits

14. Information found on a bill of materials includes material type and

- A. cutting speed
- B. tool path
- C. tolerance
- D. quantity

15. Which of the lines below represents a center line?

- A.
- B.
- C.
- D.

- A. A
- B. B
- C. C
- D. D

16. Projection lines should be drawn _____ from the incline plane when creating an auxiliary view.

- A. 15 degrees
- B. 30 degrees
- C. 90 degrees
- D. 180 degrees

17. Information that is needed in the title block of a drawing includes

- A. drawing name and scale
- B. scope of work and date
- C. architect and project budget
- D. project cost and list of drawings

18. Which of these symbols is used to represent a centerline?

- (1)
- (2)
- (3)
- (4)

- A. 1
- B. 2
- C. 3
- D. 4

19. Which of the following lines has arrowheads drawn on it?

- A. extension
- B. witness
- C. center
- D. dimension

20. Which of the following is the numerical value that defines the size or geometric characteristics of a feature?

- A. tolerance
- B. arrow
- C. dimension
- D. blind hole

21. The geometric characteristic shown below is

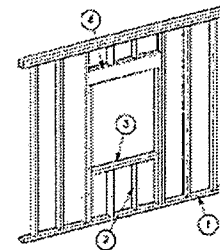


- A. circularity
- B. total runout
- C. cylindricity
- D. position

22. What type of roof style provides the most usable attic space?

- A. gable
- B. hip
- C. gambrel
- D. flat

23. Number 2 is a



- A. sole plate
- B. cripple stud
- C. sill plate
- D. jack stud

24. The _____ plan gives information on the precise location of manmade features on a property.
- foundation
 - zone
 - plot
 - elevation
25. What is the structural wood piece at the highest point of the rafters called?
- principal rafter
 - king post
 - soffit board
 - ridge board
26. A/An _____ map shows water, elevations, and physical features of a site.
- landscape
 - topographic
 - plot
 - contour
27. The term for a traffic dead-end circle is
- dead end
 - u-turn
 - cul-de-sac
 - turn-around

28. The symbol below indicates a

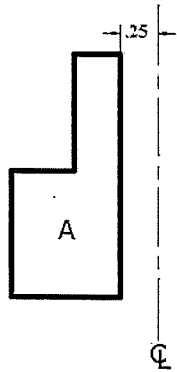


- resistor
 - capacitor
 - transistor NPN
 - transistor PNP
29. Which of the following would be a good method to manage files?
- deleting file folders
 - copying file folders
 - creating file folders
 - sharing file folders
30. The characteristic tolerance for the symbol below is



- straightness
- parallelism
- flatness
- angularity

31. When profile A is revolved around the center line, the hole diameter will be



- A. 0.50
 B. 0.75
 C. 1.00
 D. 1.50
32. Solids, surfaces, and _____ are 3-D objects.
- A. Boolean operations
 B. mass properties
 C. lithographic printing
 D. wireframes
33. What is connected to a drawing by a leader line?
- A. the drafter's name
 B. a note
 C. the date
 D. an equation

34. One geometry file type that can be imported from a CAD system to a CAM system is

- A. .DFX
 B. .DWF
 C. .SPS
 D. .PDF

35. What is the missing coordinate to complete the square?

1,1,0; 1,3,0; _____; 3,1,0; 1,1,0

- A. 1,2,0
 B. 2,3,0
 C. 3,2,0
 D. 3,3,0

Answer Key

Question	Answer	Standard Linkage	Got it Right?
1	B	Orientation	
2	D	Introduction to Drafting and Design	
3	B	Introduction to Drafting and Design	
4	B	Geometric Construction	
5	A	Lettering	
6	B	Freehand Drawing and Sketching	
7	A	Freehand Drawing and Sketching	
8	B	Freehand Drawing and Sketching	
9	B	Introduction to Engineering Math	
10	C	Introduction to Engineering Math	
11	C	Introduction to Engineering Math	
12	A	Introduction to Mechanical Drawing and Design	
13	C	Introduction to Mechanical Drawing and Design	
14	D	Introduction to Mechanical Drawing and Design	
15	C	Introduction to Mechanical Drawing and Design	

Answer Key

Question	Answer	Standard Linkage	Got it Right?
16	C	Introduction to Mechanical Drawing and Design	
17	A	Introduction to Mechanical Drawing and Design	
18	A	Dimensioning	
19	D	Dimensioning	
20	C	Dimensioning	
21	D	Dimensioning	
22	C	Introduction to Architecture	
23	B	Introduction to Architecture	
24	C	Introduction to Architecture	
25	D	Introduction to Architecture	
26	B	Introduction to Civil Drafting	
27	C	Introduction to Civil Drafting	
28	A	Introduction to Electrical Electronic Drafting	
29	C	Using Computer Assisted Drafting (CAD)	
30	C	Using Computer Assisted Drafting (CAD)	
31	A	Using Computer Assisted Drafting (CAD)	

Answer Key

Question	Answer	Standard Linkage	Got it Right?
32	D	Using Computer Assisted Drafting (CAD)	
33	B	Using Computer Assisted Drafting (CAD)	
34	A	Using Computer Assisted Drafting (CAD)	
35	D	Using Computer Assisted Drafting (CAD)	

Section 6: Additional Resources

In addition to your class work and textbook, the following sources may also help to prepare for the test (and for a career in Drafting and Design!)

Brown, W. C., and Brown, R. K. (2002). *Print reading for industry*. Tinley Park, IL: Goodheart Wilcox Company.

Giesecke, Mitchell, Spencer, Hill, Dygdon, and Novak. (2000). *Technical drawing*. (11th ed.). Boston, MA: Prentice Hall.

Helper, D., Wallach, P. R., and Helper, D. (2010). *Mechanical drawing, board and CAD techniques*. Columbus, OH: McGraw Hill.

Helsel, J. D. (2010). *Mechanical drawing board and CAD technologies*. Columbus, OH: McGraw Hill.

Kicklighter, C. E., and Brown, W. C. (2008). *Drafting and design*. (7th ed.). Tinley Park, IL: Goodheart Wilcox.

Saufley, T., and Schreiner, P. B. (2008). *Auto CAD fundamentals: Drafting and design applications*. (8th ed.). Tinley Park, IL: Goodheart Wilcox.