

Name:

Drafting & Design: Section 2 – Chapter 11: Pictorial Drawings

1. What is a *pictorial drawing*?

2. Name five widely used applications of pictorial drawings.

3. The three basic types of pictorial projection used in drafting are axonometric, oblique, and _____.

4. In axonometric projection, the lines of sight (projectors) are _____ to the plane of projection.

5. In axonometric projection, the three faces of the object are all _____ to the plane of projection.

6. Name the three types of axonometric projections.

7. In isometric projection, the three axes are at _____ with respect to each other.

A. 30°

B. 60°

C. 90°

D. 120°

8. Lines along, or parallel to, the isometric axes are called _____ lines.

9. What is the main difference between isometric drawing and an isometric projection?

10. An isometric drawing is constructed by first drawing normal surfaces as _____ lines.

11. In CAD drafting, what function allows you to draw lines along the isometric axes?

12. How are nonisometric lines drawn on an isometric drawing?

13. How is an angle drawn on an isometric drawing?

14. How do circles and arcs appear in isometric drawings?

15. Name three methods used to manually draw ellipses.

16. Which CAD command greatly simplifies the process of creating isometric circles in isometric views?

17. Irregular curves can be constructed in isometric views manually by using the _____ method.

18. Isometric _____ views are an effective means of graphically describing the interior of complex machine parts or assemblies.

19. What dimensioning system is preferred for dimensioning multiview drawings and isometric drawings?

20. The isometric axes may be located in any number of positions as long as equal _____ degree angles are maintained between the three axes.

21. What is the main disadvantage inherent in isometric drawings?

22. In a diametric projection, how many faces are equally inclined to the plane of projection?

23. What is the only difference between diametric and isometric projection?

24. In _____ projection, all three faces make different angles with the plane of projection.

25. At least _____ orthographic views are necessary to construct an oblique projection.

26. Name three types of oblique drawings.

27. What is the main disadvantage of a cavalier oblique drawing?

28. In a _____ oblique drawing, the receding lines project one-half their true length.

29. What are the most common receding angles used in drawing a general oblique drawing?

30. One of the advantages of oblique drawings is that _____ and _____ are drawn in their true shape when they are located in the frontal plane.

31. Name the three basic types of perspective drawings.

32. In perspective drawing, a _____ is an assumed point representing the position of the observer's eye.

33. What are *vanishing points*?

34. The picture plane is a _____ plane for most perspectives.

35. A one-point perspective has only one _____ point.

36. Engineering projects such as bridges and piping installations are commonly drawn in _____ perspective.

37. Circles parallel to the _____ plane appear as circles in perspective drawings.

38. Irregular curves may be drawn in perspective using the _____ method.

39. Three-point perspectives add a third _____ point.