Answers to Chapter 8 Review Basic

1. List two ways to establish an offset distance using the OFFSET command.

Answer: Enter the desired distance or pick a point through which the parallel object can be drawn.

2. Which option of the OFFSET command allows you to remove the source offset object?

Answer: Erase

3. How do you draw a single point, and how do you draw multiple points?

Answer: To draw a single point, enter the POINT command at the keyboard. To draw multiple points, pick the Multiple Points button on the Draw panel of the Home tab on the ribbon.

4. How do you access the Point Style dialog box?

Answer: Enter the DDPTYPE command at the keyboard or select Point Style... from the expanded Utilities panel on the Home ribbon tab.

5. If you use the DIVIDE command and nothing seems to happen, what should you do to make the points visible?

Answer: Change the point style by specifying a new style in the Point Style dialog box.

6. How do you change the point size in the Point Style dialog box?

Answer: Enter a value in the Point Size: text box.

7. What command can you use to place point objects that mark 24 equal segments on a line?

Answer: DIVIDE

8. What is the difference between the DIVIDE and MEASURE commands?

Answer: The DIVIDE tool is used to divide an object into a specified number of equal parts. The MEASURE tool is used to place marks at designated intervals on an object.

9. Why is it a good idea to put construction lines on their own layer?

Answer: When drawn on the current layer, construction lines plot the same as other objects. This may cause conflict with the other lines on that layer. On their own layer, construction lines are both easy to distinguish from other lines and easy to hide quickly when they are not needed.

10. Name the command that allows you to draw infinite construction lines.

Answer: XLINE

11. Name the option that allows you to bisect an angle with a construction line.

Answer: The Bisect option of the Angle option of the XLINE tool.

12. What is the difference between the construction lines drawn with the command identified in Question 10 and rays drawn with the RAY command?

Answer: Construction lines drawn with the XLINE tool extend an infinite length in two directions. Rays drawn with the RAY tool extend infinitely in only one direction from the point of origin.

13. What ASME drafting standard applies to multiview drawings?

Answer: ASME Y14.3M, Multiview and Sectional View Drawings

- 14. Provide at least four guidelines for selecting the front view of an orthographic multiview drawing.

 Answer: (Any four) Choose the view that has the best shape or most contours, shows the most natural position, displays the most stable position, provides the longest dimension, or contains the least hidden features.
- 15. How do you determine how many views of an object are necessary in a multiview drawing?

 Answer: The number of views needed depends on the complexity of the object. Use only enough views to completely describe the object.
- 16. When can you describe a part with only one view?

Answer: When the thickness can be given in a note or in the title block or when the diameter dimension is given to identify the object as round.

17. When does a drawing require an auxiliary view?

Answer: An auxiliary view is typically needed when a surface on the object is at an angle to the line of sight. The view shows the surface in true size and shape.

18. List two methods of aligning the views in a multiview drawing.

Answer: Using construction lines and object snap tracking.

19. What is the angle of projection from the slanted surface into the auxiliary view?

Answer: 90° (perpendicular)

20. Describe an effective method of constructing an auxiliary view even if you do not know the angle of the inclined surface.

Answer: Use the Perpendicular object snap with the XLINE or RAY tool to snap perpendicular lines to the inclined surface.