Answers to Chapter 3 Review

1. When you enter a fractional number in AutoCAD, why is a hyphen required between a whole number and its associated fraction?
Answer: A hyphen is required because a space acts just like pressing [Enter] and ends the input.

2. Describe the Cartesian coordinate system.
Answer: The Cartesian coordinate system is a rectangular system of axes on which any point in 2D or 3D space can be located by referencing its distance from the origin.

3. Explain how to use the wheel on a mouse to zoom in, zoom out, and pan.
Answer: To zoom in, roll the mouse wheel forward. To zoom out, roll the mouse wheel back. To pan, press and hold the mouse wheel and then move the mouse.

4. List two ways to discontinue drawing a line.
Answer: (Any two) Press [Enter] or the space bar, right-click and select Enter from the shortcut menu, or press the [Esc] key.

5. Explain what is meant by the absolute coordinate entry 5.250,7.875 in relationship to the origin.
Answer: The location of the point in relationship to the origin is 5.250 units in the +X direction and 7.875 units in the +Y direction.

6. Explain what is meant by the relative coordinate entry @2,2.
Answer: The location of the point is 2 units in the +X direction and 2 units in the +Y direction from the previous point.

7. Explain what is meant by the polar coordinate entry @2.750<90.
Answer: The location of the point is 2.750 units from the last point at an angle of 90°.

8. What two general methods of point entry are available when dynamic input is active?
Answer: Pointer input and dimensional input.

9. Explain how you can continue drawing another line segment from a previously drawn line.
Answer: Reissue the LINE command and press [Enter] at the Specify first point: prompt.

10. Name two ways to access the Snap and Grid tab of the Drafting Settings dialog box.
Answer: (Any two) Right-click on the Snap Mode button or pick the Snap Mode flyout in the status bar and select Settings... from the shortcut menu; or enter DS, SE, or DSETTINGS.

11. How do you activate snap mode?
**Answer:** Pick the **Snap Mode** button in the status bar, press the [F9] function key, or enter the **SNAP** command to toggle Snap mode.

12. How do you set a grid spacing of .25?
**Answer:** Access the **Drafting Settings** dialog box and enter .25 for the **Grid X spacing:** and **Grid Y spacing:** values in the **Grid** area.

13. Explain, in general terms, how direct distance entry works.
**Answer:** In direct distance entry, you use the cursor to specify the direction and a keyboard entry to specify a distance for the point. To draw a line using this method, pick the first point, and then drag the cursor in any desired direction. Enter a numeric value that indicates the distance from the first point.

14. What are the default angle increments for polar tracking?
**Answer:** 0°, 90°, 180°, 270°

15. How can you turn on ortho mode?
**Answer:** (Any of the following) Pick the **Ortho Mode** button on the status bar, press the [F8] function key, press the [Ctrl]+[L] key combination, or enter the **ORTHO** command.

16. Which running object snap modes are active by default?
**Answer:** The **Endpoint**, **Center**, **Intersection**, and **Extension** running object snap modes are active by default.

17. Name the drawing aids that must be active for object snap tracking to function.
**Answer:** Object snap tracking and running object snap must be active, with the appropriate snap modes.

18. When you access the **ERASE** command, what replaces the screen crosshairs?
**Answer:** Pick box

19. How many command sequences can you undo at one time with the **U** command?
**Answer:** One

20. Name the command used to bring back an object that was previously removed using the **UNDO** command.
**Answer:** **REDO**

21. Name the command used to bring back the last object(s) erased before starting another command.
22. How does the appearance of window and crossing selection boxes differ?  
Answer: The window selection box has a solid outline and a blue background, and the crossing selection box has a dotted outline and a green background.

23. List five ways to select an object to erase.  
Answer: (Any five) Use a window selection, crossing selection, lasso selection, fence selection, last selection, window polygon selection, or crossing polygon selection.

24. Define stacked objects.  
Answer: Stacked objects are objects that overlap one another in a 2D drawing.