Answers to Chapter 12 Review Basic

1. How would you rotate an object 45° clockwise?
   Answer: Enter the ROTATE command, pick the objects to be rotated, specify the base point for the rotation, and enter –45 for the rotation angle.

2. Briefly describe the two methods of using the Reference option of the ROTATE command.
   Answer: You can define the existing angle and then the new angle, or you can identify a reference line on the object and rotate the object in relationship to the reference line.

3. Name the command that you can use to move and rotate an object at the same time.
   Answer: ALIGN

4. How many points must you select to align an object in a 2D drawing?
   Answer: Four: two source points and two destination points.

5. Explain the difference between the MOVE and COPY commands.
   Answer: The MOVE command is used to move an object to a new position. The COPY command is used to make a copy or multiple copies of an existing object while retaining the original object.

6. Which command allows you to draw a reflected image of an existing object?
   Answer: MIRROR

7. What is the purpose of the REVERSE command?
   Answer: The REVERSE command reverses the calculation of points along lines, polylines, splines, and helixes.

8. What is the difference between polar and rectangular arrays?
   Answer: Polar arrays copy objects in circular patterns. Rectangular arrays are arrangements of rows and columns.

9. What does AutoCAD use as the default base point for a rectangular array?
   Answer: The centroid, or center between the extents of the selected objects, is the default base point.

10. Suppose an object is 1.5” (38 mm) wide and you want to create a rectangular array with .75” (19 mm) spacing between objects. What should you specify for the distance between columns?
    Answer: 2.25” (57.15 mm)

11. Define associative array.
    Answer: An associative array is an adjustable array object; all items are grouped to form a single object that you can modify, such as changing the number of items and spacing between items.
12. How do you specify a clockwise circular array rotation?  
   **Answer:** Enter a negative value when prompted for the angle to fill.

13. What value should you specify for the angle to fill to create a complete circular array?  
   **Answer:** 360

14. List the objects you can use as a path for a path array.  
   **Answer:** line, circle, arc, ellipse, polyline, spline, helix

15. Describe the spacing between items that occurs when you use the Divide option of the ARRAYPATH command.  
   **Answer:** The Divide option places items at equally spaced locations on the path. AutoCAD calculates the distance between items based on the number of items you specify.