# **Chapter Review**



Answer the following questions. Write your answers on a separate sheet of paper or complete the electronic chapter review on the companion website. www.g-wlearning.com/CAD

- 1. When you use the **CIRCLE** command, what are the options for responding to the prompt Specify radius of circle?
- 2. Explain how to create a circle with a diameter of 2.5 units.
- 3. What option of the **CIRCLE** command creates a circle of a specific radius that is tangent to two existing objects?
- 4. Define the term *point of tangency*.
- 5. Explain how to draw a circle tangent to three objects.
- 6. Explain the procedure to draw an arc beginning with the center point and having a 60° included angle.
- 7. Define the term included angle as it applies to an arc.
- 8. What is the default option if you enter the ARC command at the keyboard?
- 9. List three input options that you can use to draw an arc tangent to the endpoint of a previously drawn arc.
- 10. Name the two axes found on an ellipse.
- 11. Briefly describe the procedure to draw an ellipse using the Axis, End option.
- 12. What **ELLIPSE** rotation angle results in a circle?
- 13. How do you draw a filled arrow using the PLINE command?
- 14. Which **PLINE** option allows you to specify the width from the center to one side?
- 15. Explain how to turn off FILL mode.
- 16. Briefly describe how to create a polyline parallel to a previously drawn line or polyline.
- 17. Explain how to draw a hexagon measuring 4" (102 mm) across the flats.
- 18. Name at least three commands you could use to create a rectangle.
- 19. Name the command option used to draw rectangles with rounded corners.
- Name the command option designed for drawing rectangles with a specific line thickness.
- 21. Explain how to draw a rectangle at an angle other than 0°.
- 22. Describe a method for drawing a solid circle.
- 23. Explain how to draw two donuts with an inside diameter of 6.25 and an outside diameter of 9.50.
- 24. Name the command you can use to create a true spline.
- 25. How do you accept the AutoCAD defaults for the start and end tangents of a spline?

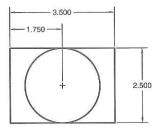
## **Drawing Problems**

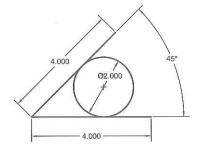
Start AutoCAD if it is not already started. Start a new drawing from scratch or use an appropriate template of your choice. Follow the specific instructions for each problem. Use only drawing commands and techniques you have already learned. Do not draw dimensions or text. Use your own judgment and approximate dimensions when necessary.

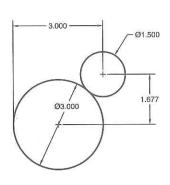
#### **▼** Basic

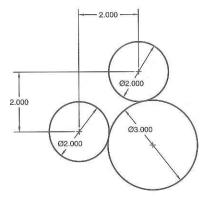


1. Use the **LINE**, **CIRCLE**, and **RECTANGLE** commands to draw the objects shown. Save the drawing as P4-1.

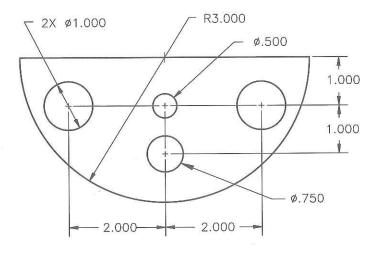




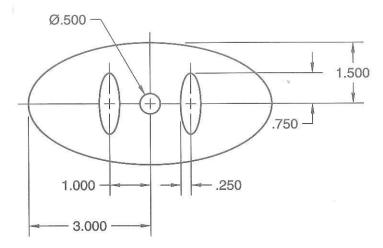




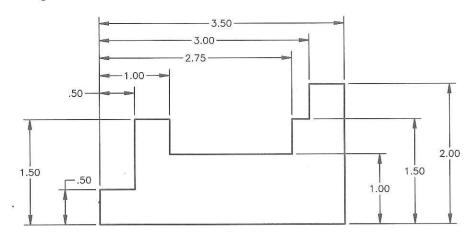
2. Use the **CIRCLE** and **ARC** commands to draw the object shown. Save the drawing as P4-2.



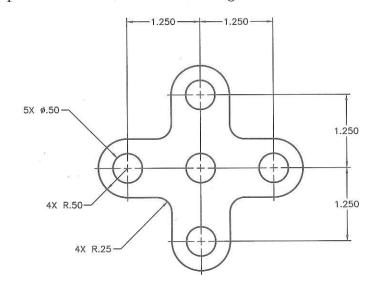




4. Use the **PLINE** command and a .03 width to draw the object shown. Save the drawing as P4-4.



5. Draw the part view shown. Save the drawing as P4-5.



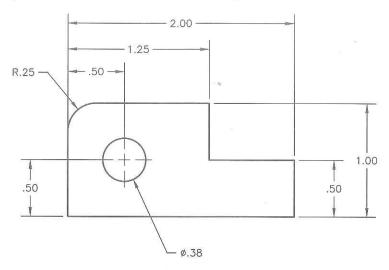




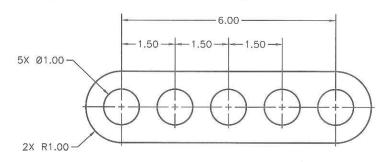




6. Draw the part view shown. Save the drawing as P4-6.

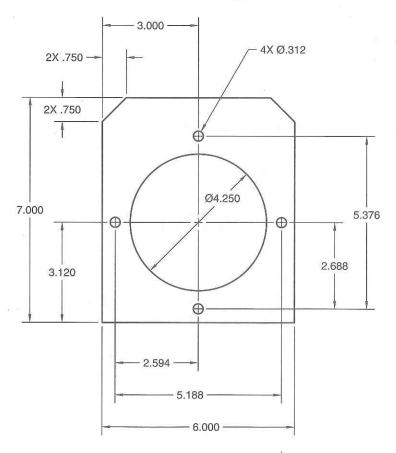


7. Draw the pipe spacer shown. Save the drawing as P4-7.



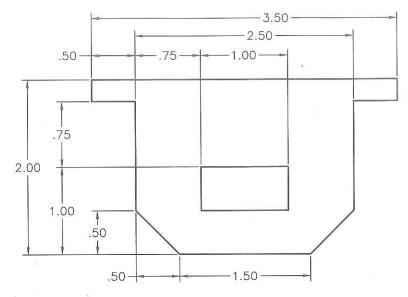
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8. Draw the part view shown. Save the drawing as P4-8.

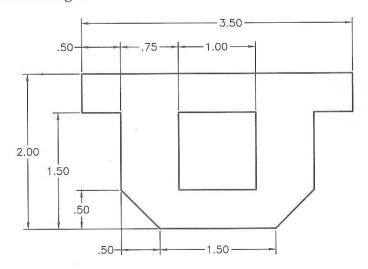


9. Use the **PLINE** command and a .03 width to draw the object shown. Save the drawing as P4-9.





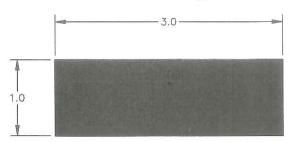
- 10. Use the **PLINE** command and a .03 width to draw the object shown.
  - A. Deactivate solid fills and use the **REGEN** command.
  - B. Reactivate solid fills and reissue the **REGEN** command.
  - C. Observe the difference with solid fills enabled.
  - D. Save the drawing as P4-10.





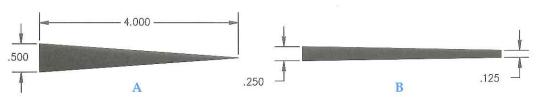


11. Use the PLINE command to draw the filled rectangle shown. Save the drawing as P4-11.



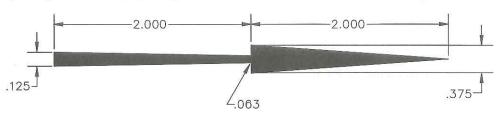
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12. Use the PLINE command to draw the arrowheads shown. Save the drawing as P4-12.





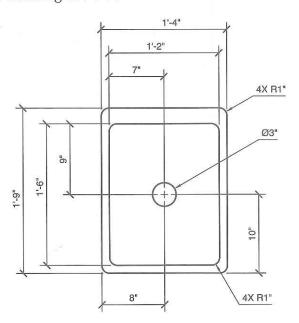
13. Use the **PLINE** command to draw the arrow shown. Set decimal units, .25 grid spacing, .0625 snap spacing, and limits of 11,8.5. Save the drawing as P4-13.





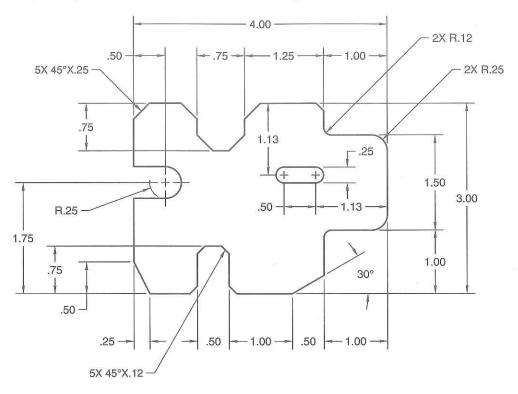
#### **▼** Intermediate

14. Use the **RECTANGLE** and **CIRCLE** commands to draw the single kitchen sink shown. Save the drawing as P4-14.



### **▼** Advanced

22. Draw the part view shown. Save the drawing as P4-22.



23. Draw the part view shown. Save the drawing as P4-23.

