

NOTE

You cannot import drawing content if the content uses the same name as existing content. For example, AutoCAD ignores a layer you try to import if the layer name already exists in the destination drawing. The existing settings for the layer are preserved, and a message at the command line indicates that duplicate settings were ignored.



Exercise 5-7

Complete the exercise on the companion website.
www.g-wlearning.com/CAD



Template Development Adding Layers

For detailed instructions on adding layers to each of your drawing templates, go to the companion website, navigate to this chapter in the **Contents** tab, and select **Adding Layers**.
www.g-wlearning.com/CAD



Chapter Review

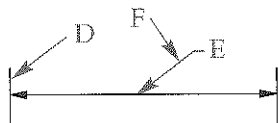
Answer the following questions. Write your answers on a separate sheet of paper or complete the electronic chapter review on the companion website.
www.g-wlearning.com/CAD

1. Identify the following linetypes:

A

B

C



G

H

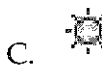
I

J

K

2. How can you tell if a layer is off, thawed, or unlocked by looking at the **Layer Properties Manager**?
3. Should you draw on layer 0? Explain.
4. Identify two ways to access the **Layer Properties Manager**.

5. How can you enter several new layer names consecutively in the **Layer Properties Manager** without using the **New Layer** button?
6. How do you make another layer current using the **Layer Properties Manager**?
7. How do you make another layer current using the ribbon?
8. How do you make another layer current using the command line?
9. How can you display the **Select Color** dialog box from the **Layer Properties Manager**?
10. List the seven standard color names and numbers.
11. How do you use the **Layer Properties Manager** to change the linetype assigned to a layer?
12. What is the default loaded linetype in AutoCAD?
13. What condition must exist before you can assign a linetype to a layer?
14. Describe the basic procedure to change a layer's linetype to HIDDEN.
15. What is the function of the linetype scale?
16. Explain the effects of using a global linetype scale.
17. Why do you have to be careful when changing linetype scales?
18. What is the state of a layer not displayed on-screen and not calculated by the computer when you regenerate the drawing?
19. Explain the purpose of locking a layer.
20. Explain the difference between a locked layer state and layer transparency.
21. Identify the following layer status icons:



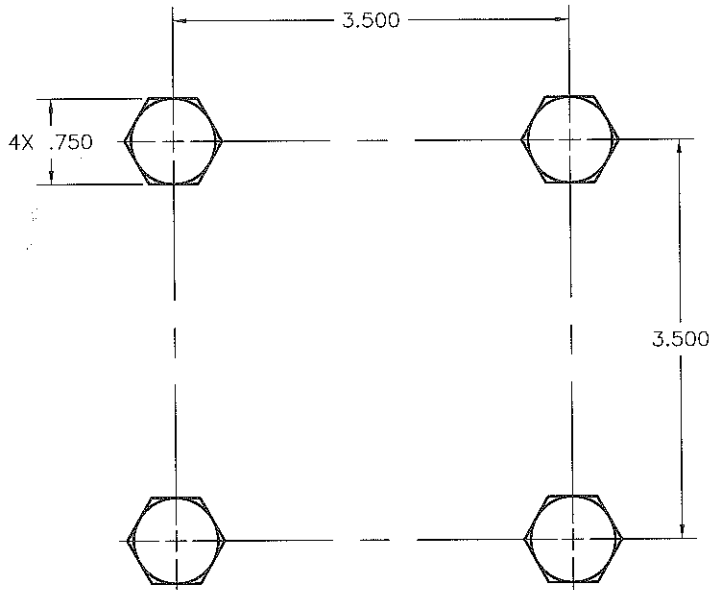
22. Identify at least three layers that you cannot delete from a drawing.
23. Describe the purpose of layer filters.
24. Which button in the **Layer Properties Manager** allows you to save layer settings so they can be restored later?
25. In the **Tree View** pane of **DesignCenter**, how do you view the content categories of one of the listed open drawings?
26. How do you display all the available layers in a drawing in **DesignCenter**?

Drawing Problems

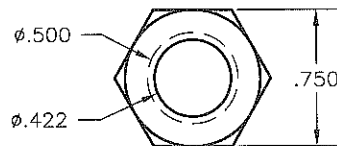
Start AutoCAD if it is not already started. For each problem, start a new drawing from scratch or use an appropriate template of your choice. The template should include layers for drawing the given objects. Add layers as needed. Draw all objects using appropriate layers. Follow the specific instructions 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

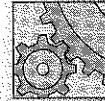
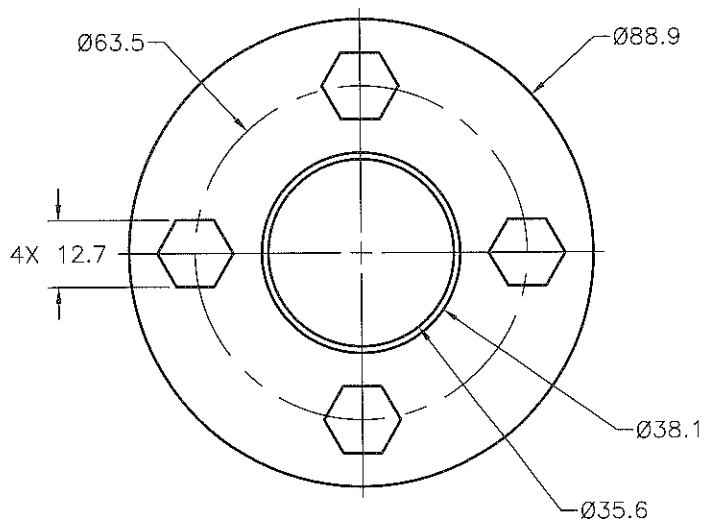
1. Draw the hex head bolt pattern shown. Save the drawing as P5-1.



2. Draw the 1/2" hex nut with 3/4" across the flats and a .422" minor diameter. Save the drawing as P5-2.

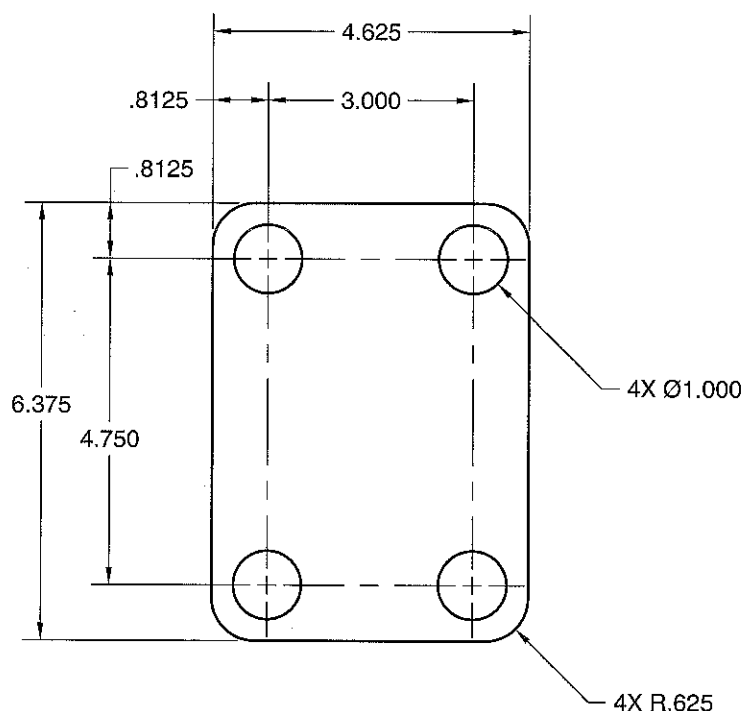


3. Draw the part view shown. Save the drawing as P5-3.





4. Draw the part view shown. Save the drawing as P5-4.



▼ Intermediate

5. Open P4-3, create or import a new layer for centerlines, and draw the centerlines using the centerline layer. If you have not yet completed Problem 4-3, do so now. Save the drawing as P5-5.
6. Open P4-7, create or import a new layer for centerlines, and draw the centerlines using the centerline layer. If you have not yet completed Problem 4-7, do so now. Save the drawing as P5-6.

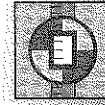
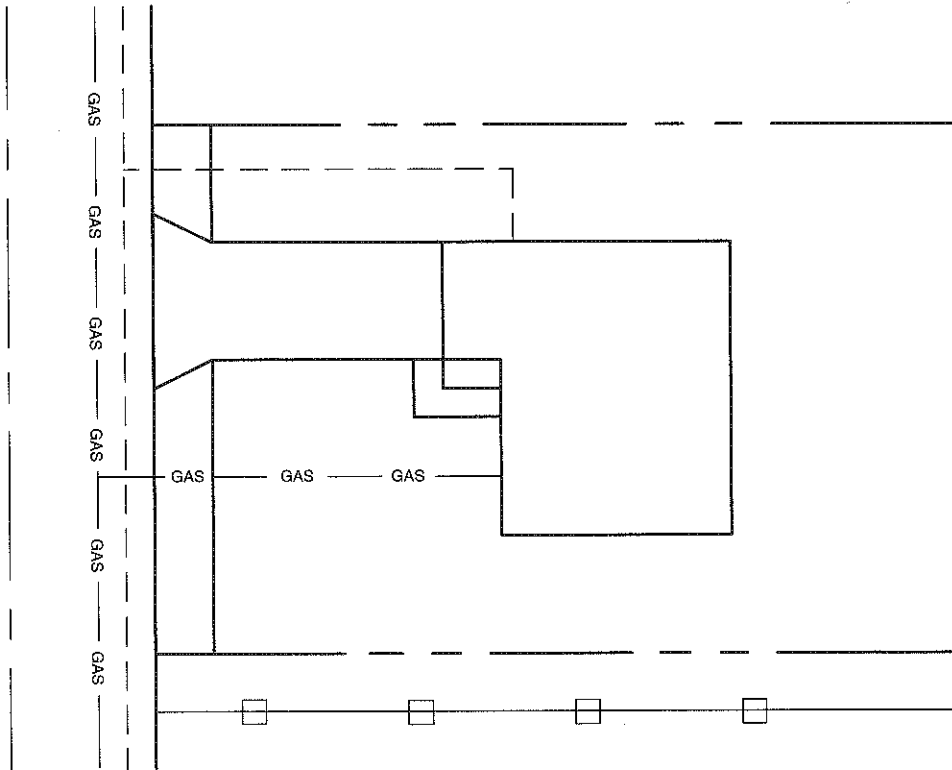
▼ Advanced

7. Open P4-18, create or import a new layer for hidden lines, and draw or redraw the hidden lines using the hidden line layer. If you have not yet completed Problem 4-18, do so now. Change the global linetype scale to achieve an effect similar to the hidden lines shown in Chapter 4. Save the drawing as P5-7.



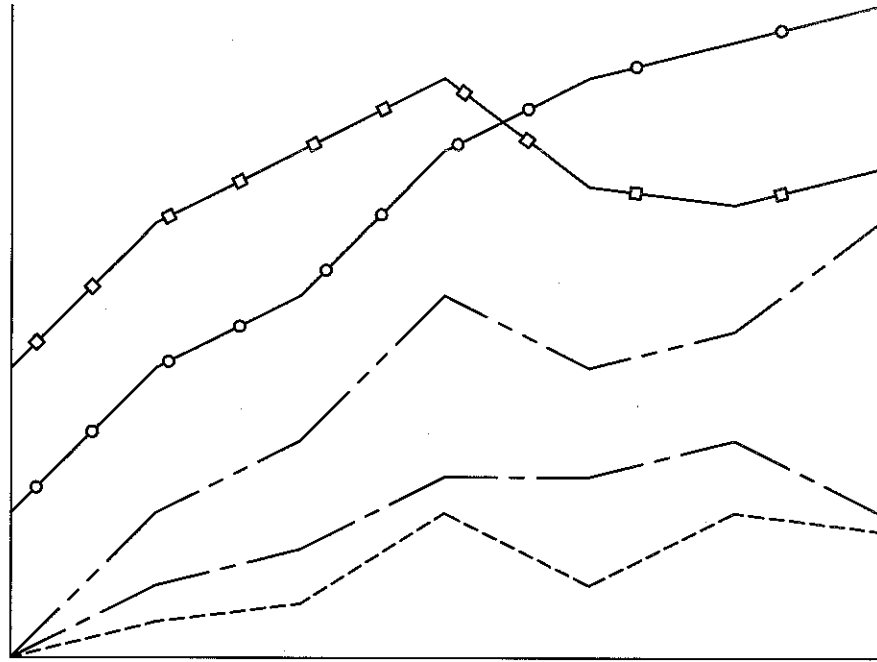
8. Draw the plot plan shown using the layers shown in the table. Draw objects proportionate to the drawing shown. Use dimensions based on your experience, research, or measurements. Save the drawing as P5-8.

Name	Color	Linetype	Lineweight	Description
C-BLDG	white	Continuous	0.60 mm	Buildings, primary structures
C-PROP	white	PHANTOM	0.70 mm	Property boundary
C-ROAD-CURB	9	Continuous	0.35 mm	Road curb
C-SLAB	8	Continuous	0.35 mm	Slab
C-ROAD-CNTR	white	CENTER	0.35 mm	Road center
C-FENC	134	FENCELINE2	0.35 mm	Fences
C-NGAS-UNDR	30	GAS_LINE	0.50 mm	Underground natural gas
C-SSWR-UNDR	54	DASHED	0.50 mm	Underground sanitary sewer





9. Draw the line chart shown. Use the linetypes shown, which include Continuous, HIDDEN, PHANTOM, CENTER, FENCELINE1, and FENCELINE2. Draw objects proportionate to the drawing. Save the drawing as P5-9.



10. Draw the front elevation shown. Use the overall dimensions shown and add dimensions based on your experience, research, or measurements. Save the drawing as P5-10.

