Exercise 22-2

1. Start AutoCAD if it is not already started.
2. Start a new drawing from scratch or use a decimal inch template of your choice.
3. Set up the appropriate layers, including a layer for dimensions.
4. Set the drawing units length precision to 0.00.
5. Turn on Infer Constraints.
6. Use the LINE command, the default horizontal and vertical polar tracking angles, and direct distance entry to construct a 4-unit by 2-unit rectangle. Make the first 4-unit side horizontal. Exit the LINE command only after you draw all four segments. Four coincident constraints create the corners, a horizontal constraint makes one side horizontal, and three perpendicular constraints make the sides perpendicular.
7. Use grip editing to experiment with stretching the endpoints of the lines. Notice that the geometric constraints make the lines perform like an actual rectangle, instead of a group of line segments.
8. Turn off the Infer Constraints tool.
9. Use the LINE command, the default horizontal and vertical polar tracking angles, and direct distance entry to construct another 4-unit by 2-unit rectangle. Make the first 4-unit side horizontal. Exit the LINE command only after you draw all four segments.
10. Use grip editing to experiment with stretching the endpoints of the lines you created in the previous step. You should notice a significant difference between editing this rectangle and the inferred constraints rectangle.
11. Turn on the Infer Constraints tool and draw a vertically constrained 2.5-unit line.
12. Draw a ∅1.5-unit circle away from existing objects. Use the MOVE command and Center and Midpoint running object snaps to move the center of the circle to the midpoint of the 2.5-unit line.
13. Use the MOVE command to move the line. Notice that the coincident constraint causes the circle to move with the line.
14. Save the drawing as EX22-2.
15. Keep AutoCAD open for the next exercise, or exit AutoCAD if necessary.