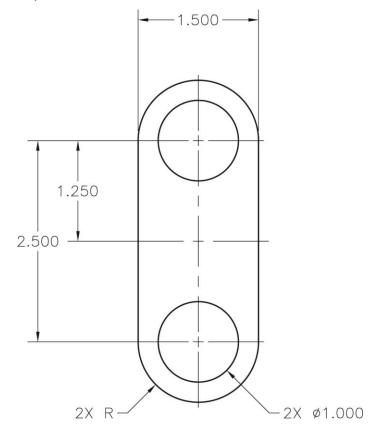
AutoCAD and Its Applications BASICS

Exercise 22-7

- 1. Continue from Exercise 22-6 or start AutoCAD.
- 2. Start a new drawing from scratch or use an inch-unit template of your choice. Save the drawing as EX22-7.
- 3. Set the drawing units length precision to 0.000.
- 4. Draw a Ø.500" circle and use the **COPY** command to copy the circle twice to create three circles. Provide 2" between the centers of the adjacent circles and use the **GCHORIZONTAL** or **GEOMCONSTRAINT** command to align the circles horizontally.
- 5. Use the **GCEQUAL** or **GEOMCONSTRAINT** command to make all the circles equal.
- 6. Use the **Properties** palette to change the diameter of any one of the circles to .750. All of the circles should change size.
- 7. Draw the front view of the part exactly as shown. Extend the centerline .125" past the object. Do not dimension.



- 8. Use the **GCCOINCIDENT** or **GEOMCONSTRAINT** command to add the coincident constraints shown in the original drawing in Figure 22-16.
- 9. Use the **GCTANGENT** or **GEOMCONSTRAINT** command to add the tangent constraints shown in the original drawing in Figure 22-16.
- 10. Use the **GCCONCENTRIC** or **GEOMCONSTRAINT** command to add the concentric constraints shown in the original drawing in Figure 22-16.
- 11. Use the **GCSYMMETRIC** or **GEOMCONSTRAINT** command to add the symmetric constraints shown in the original drawing in Figure 22-16.
- 12. Use the **GCFIX** or **GEOMCONSTRAINT** command to add the fix constraint shown in the original drawing in Figure 22-16.
- 13. Select the top concentric circle to activate grips. Pick the center grip box and stretch the circle vertically. The view should adjust symmetrically.
- 14. Resave and close the file.
- 15. Keep AutoCAD open for the next exercise, or exit AutoCAD if necessary.