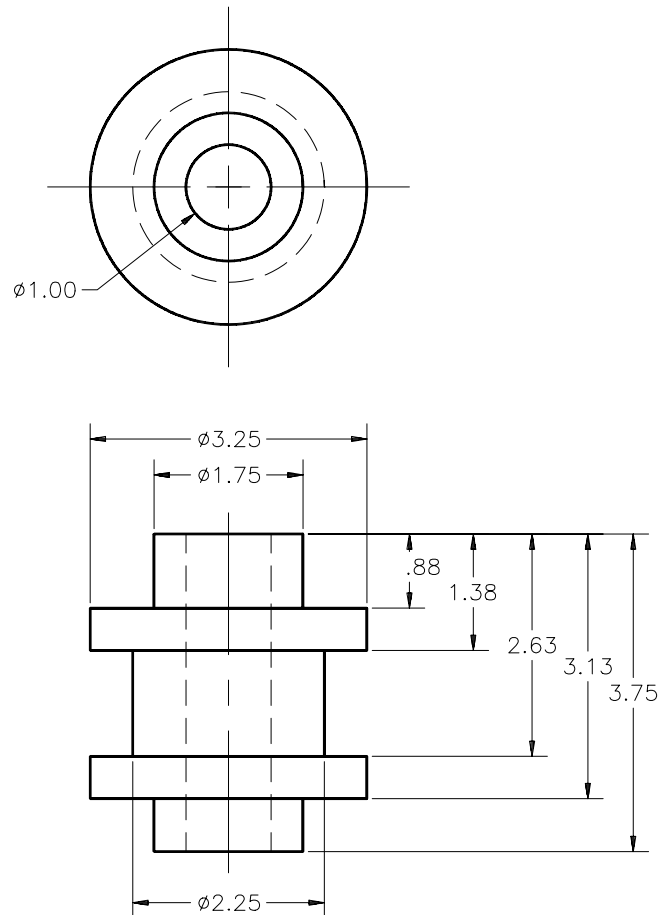## CHAPTER 16 EXERCISES

1. Flanged Sleeve

Complete the flanged sleeve shown in Figure ME16-1. Create *Layers* for each of the separate line types. Assign appropriate *Lineweights* to the layers as shown in the figure. Use the *Properties* window to move all continuous lines to a *Layer* called **Geometry**. *Save* the drawing as **CH16EX1-M.**
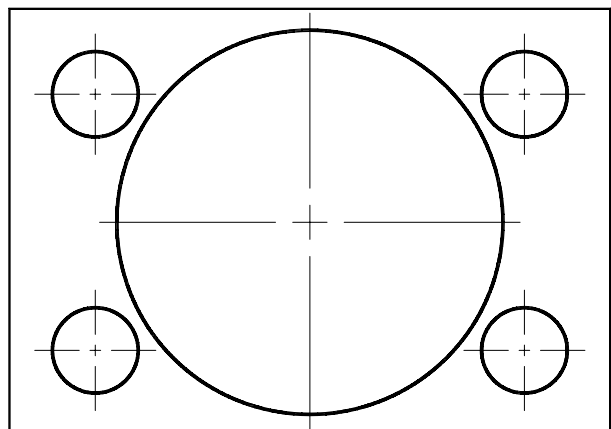
Figure ME16-1 ───────────────

2. Plate

Open the **CH8EX2** drawing from Chapter 8 exercises. Draw *Lines* on the current layer to represent the center lines shown in Figure ME16-2. Next create an appropriate *Layer* and *Linetype* for center lines and use *Properties* to place the lines on the proper layer. *Save* the drawing as **CH16EX2-M.**
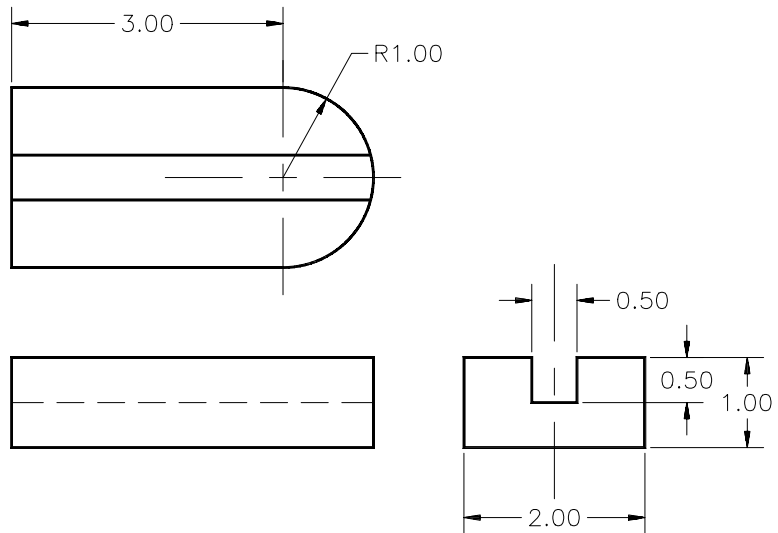
Figure ME16-2 ───────────────

3. Cam Plate

Draw the cam plate shown in
Figure ME16-3 using *Lines* and
Arcs or *Circles*. When finished,
use the *Pedit* command and
convert the existing *Lines* and
Arc to *Plines* with a *Width* of **.1**.
Add the necessary center and
hidden lines. *Save* the drawing
as **CH16EX3-M.**

Figure ME16-3

4. Displacement Diagram

Draw the cam displacement diagram as shown in Figure ME16-4. First, draw one horizontal
Line and use the *Divide* command to help lay out 13 equally spaced vertical lines. Draw half of
a *Circle* at the left-most vertical line and *Array* the vertical line 7 times to fill **180** degrees.
Construct the respective horizontal projection lines from the ends of the radial lines. Place a
Donut at each line intersection, then use the *Spline* command to draw the cam profile. *Trim* as
necessary. *Save* the drawing as **CH16EX4-M.**

Figure ME16-4