AutoCAD and Its Applications ADVANCED

Exercise 9-5

In this exercise, you will refine a mesh to see how the number of subdivisions is increased. You will also see how the smoothness level is reset if the entire model is refined.

- 1. Open the drawing EX09_05.dwg available on the companion website.
- 2. Select the object and display the **Properties** palette. Notice how the Smoothness property in the **Geometry** category is none; this is level 0. Also, in the **Mesh** category, notice that the Number of faces property is 36.
- 3. Use the **MESHSMOOTHMORE** command to increase the smoothness level to 1.
- 4. Enter the **MESHREFINE** command and select the mesh. Notice how the number of faces quadruple. The mesh smoothness level resets to 0, but the faces increase to 144.
- 5. Use the **MESHSMOOTHMORE** command again to set the smoothness level to 1.
- 6. Enter the **MESHREFINE** command and select the mesh. Make note of the smoothness level and the face total.
- 7. Could you continue with this process again? Yes, but the mesh would be so dense (over 2300 faces) that it would become difficult to edit the mesh faces.
- 8. Save the drawing as EX9-5.