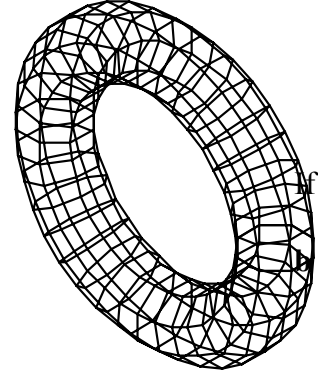


Chapter 12**TORUS****A. OPEN B FILE.**

Step 1. When you start a new drawing away start with the B file. If you started this drawing as the B file go directly to Steps B. If you did not start as the B file complete these Steps: Click Open from the File Menu. Click No to save current part. Key in **a:** for the filename and press ENTER.

B. TURN OFF GRID and SNAP.

Step 1. Turn off the Grid and Snap. Use **CTRL-G**. Hold down CTRL and press G.

Step 2. Click **Off** in Grid Properties Display.

Step 3. Click to **uncheck Active** in Snap Properties. Click OK.

C. CREATE A 8 SIDED POLYGON.

Step 1. ESC to Main Menu.

Step 2. F1 CREATE.

Step 3. F5 POLYLINE.

Step 4. F3 N-GON.

Step 5. Key in **12** for the Number of Sides and press ENTER.

Step 6. Key in **0** for Rotation Angle.

Step 7. Key in **1** for Radius and press ENTER.

Step 8. F2 FLAT.

Step 9. F1 CURSOR. Move cursor to middle of screen and click.

D. CHANGE VIEW.

Step 1. ESC to Main Menu.

Step 2. Change to the Front View. Use **ALT-V 2**. Hold down ALT and press V. Key in **2** and press ENTER. The view now appears as a line.

Step 3. Use **ALT-A** to center the drawing on the screen. Hold down ALT and press A.

Step 4. Use **ALT-H three times** to reduce drawing on the screen. Hold down ALT and press H.

E. ROTATE INTO 3 DIMENSIONS.

Step 1. F4 X-FORM.

Step 2. F3 ROTATE.

Step 3. F3 JOIN.

Step 4. F2 ARCS.

Step 5. F7 ALL DISPLAYED.

Step 6. F1 ALL.

Step 7. Key in **36 for the Number of Copies**.

Step 8. Use **Alt-H** to reduce the drawing half size. Hold down ALT and press H.

Step 9. Click the left edge of the display. This distance will be the radius of the center of the torus. In other words, the center of the hole in the donut.

Step 10. Press ENTER to accept 2nd point on axis.

Step 11. Key in **10 for the Rotational Angle** and press ENTER. **Note:** Number of copies (Step 9) and the Rotation Angle (Step 11) multiplied together must equal 360.

Step 12. Use **ALT-A** to center the drawing on the screen. Hold down ALT and press A.

Step 13. Change to a different view. Change to the Isometric View. Use **ALT-V 7**. Hold down ALT and press V. Key in 7 and press ENTER.

Step 15. Save the drawing. Use **CTRL-S** to save. Key in **a:torus1** for a filename and press ENTER.

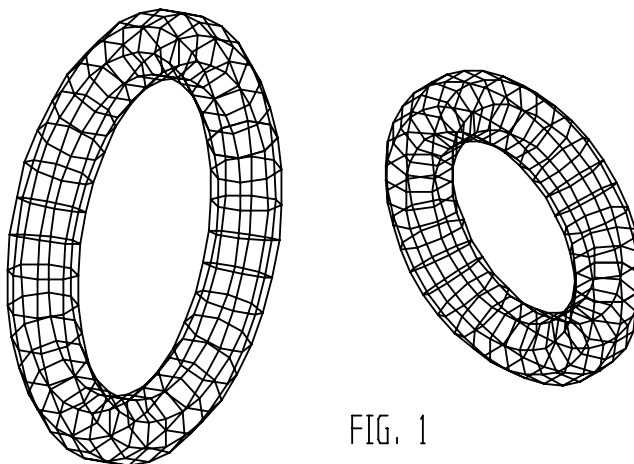


FIG. 1