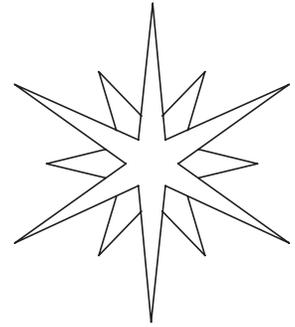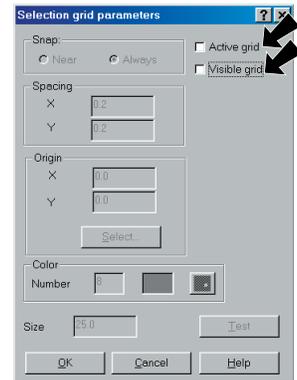## Chapter 7   12 POINT STAR

A. Turn Off Grid and Snap.

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

Step 2. Click to uncheck **Active grid** and **Visible grid** in Snap Properties, **Fig. 1**.

Step 3. Click OK.

B. Create Three 6 Sides Polygons.

Step 1. MAIN MENU.

Step 2. Create.

Step 3. Next Menu.

Step 4. Polygon.

Step 5. Set: Number of Sides **6**
                 Radius **3**
                 Rotation Angle **30** and click OK, **Fig. 2**.

Step 6. Origin.

Step 7. BACKUP.

Step 8. Polygon.

Step 9. Set: Radius **2**
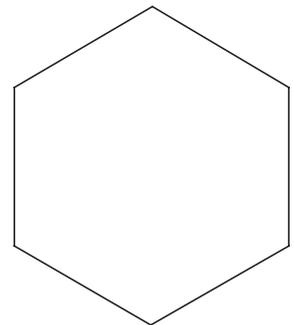   Rotation Angle **0** and click OK, **Fig. 3**.
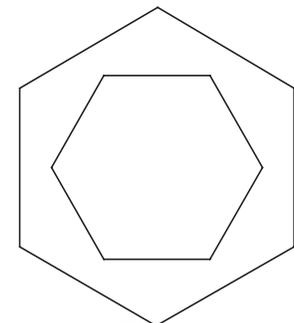
Step 10. Origin.

Step 11. BACKUP.

Step 12. Polygon.

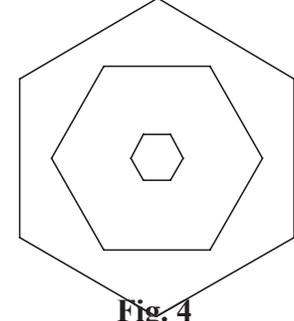Step 13. Set: Radius **.5** and click OK, **Fig. 4**.

Step 14. Origin.

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fit on Screen ALT-F1	Delete F5	Repaint F3	Zoom In F1	Unzoom Page Down

C. Save Your File

Step 1.   MAIN MENU.

Step 2.   File.

Step 3.   Save.

Step 4.   Key in **12star** file name and press ENTER.

D. Draw The Big Points.

Step 1.   Draw the lines **red**. Change the color to red. Click the color swatch in the Secondary Menu (bottom of the menu). Click red, number 12 and click OK.
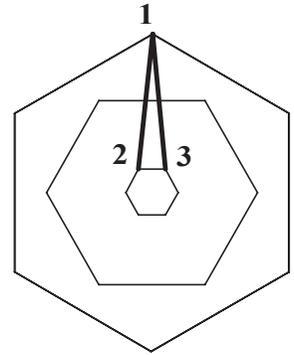
Step 2.   MAIN MENU.

Step 3.   Create.

Step 4.   Line.

Step 5.   Endpoints.

Step 6.   Endpoints (again). Endpoints will preform a search and locate the exact corner you are drawing a line to.
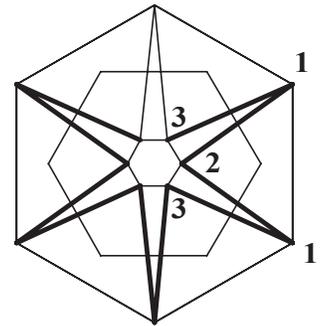
Fig. 5

Step 7.   Move the cursor to Point 1 on the big polygon and click, **Fig. 5**. Press the E key on the keyboard to select Endpoints and click the next corner, Point 2 on the small polygon. **Remember to press the E key first** then click a point. Draw the other side, click Point 1 on the big polygon and click Point 3 on the small polygon, **Fig. 5**.

Press E before clicking!

Step 8.   Continue and draw the points of the star from the big polygon to the small polygon, click Point 1 on the big polygon and click Point 2 or Point 3 on the small polygon, **Fig. 6**.

Step 9.   Save your drawing. Use **Alt-A** and press ENTER.

Fig. 6

E. Draw The Small Points.

Step 1.   Draw the next lines in a different color. Change the color to **yellow**. Click the color swatch in the Secondary Menu (bottom of the menu). Click yellow, number 14 and click OK.
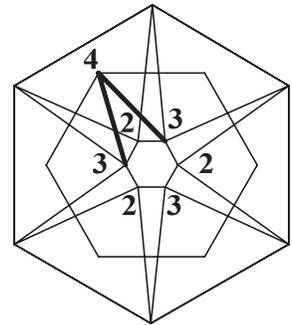
Step 2.   MAIN MENU.

Step 3.   Create.

Fit on Screen ALT-F1	Delete F5	Repaint F3	Zoom In F1	Unzoom Page Down

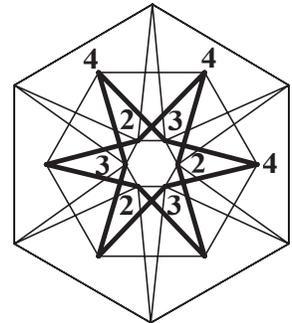**Step 4.**   Line.

Step 5.   Endpoints.

Step 6.   Endpoints (again). Endpoints will preform a search and locate the exact corner you are drawing a line to.

Step 7.   Move the cursor to Point 4 on the middle polygon and click, **Fig. 7**. Press the E key on the keyboard to select Endpoints and click the next corner, Point 3. **Remember to press the E key first** then click a point. Draw the other side, click Point 4 on the middle polygon and click Point 3 on the small polygon, **Fig. 7**.

Step 8.   Continue and draw the points of the star from the middle polygon to the small polygon, **Fig. 8**.

Step 9.   Save your drawing. Use **Alt-A** and press ENTER.

F. Delete The Three Polygons.
 Step 1.   The polygons are no longer needed. Use **F5** to delete it. Press F5 and click each line of the three pentagons. Press ESC to exit delete.
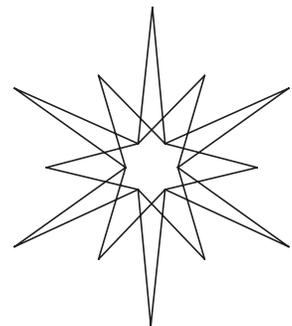
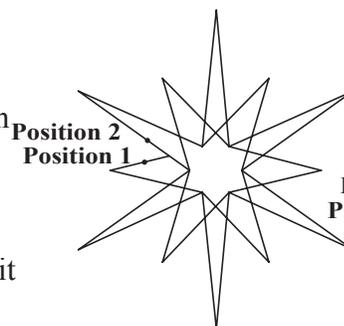## G. Trim Lines.
Step 1.   MAIN MENU.

Step 2.   Modify.
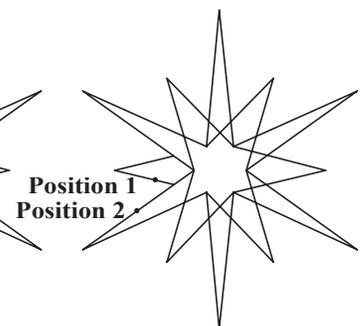
Step 3.   Trim.

Step 4.   1 Entity.

Step 5.   Trim lines of the short yellow lines to the long red lines. Click Position 1 on the yellow line then, click Position 2 on the red line, **Fig. 10**. Repeat at other yellow lines. That is, click the part of the line you are keeping the **outside of the yellow line**, then click the red line it crosses, **Fig. 11**.

Step 6.   Save your drawing. Use **Alt-A** and press ENTER.

Fig. 7

Fig. 8

Fig. 9

Position 2
Position 1

Position 1
Position 2

Fig. 10   **Fig. 11**

Click the outside of the yellow line then click the red line

Fit on Screen ALT-F1	Delete F5	Repaint F3	Zoom In F1	Unzoom Page Down

H. Add Your Name and Period To The Drawing.

Step 1.   Use **Page Down** to reduce the drawing. Use: **Create, Drafting, Note** commands to add your name and period to the drawing.

Step 2.   Save your drawing. Use **Alt-A** and press ENTER.

Fit on Screen ALT-F1	Delete F5	Repaint F3	Zoom In F1	Unzoom Page Down

Mastercam 12 POINT STAR Page 7-4