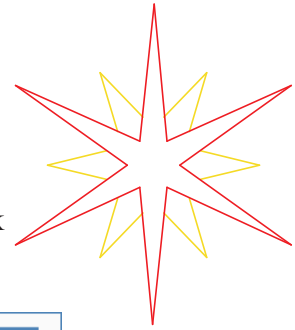
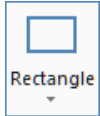


12 Point Star



A. Create Three 6 Sided Polygons.

Step 1. If necessary start a new Mastercam file, click **New**  on the Quick Access Toolbar QAT (Ctrl-N).

Step 2. On the Wireframe tab **WIREFRAME** click **Polygon** on **Rectangle**  drop down.

Step 3. In the Polygon dialog box set:

Expand  **Fig. 1**

Number of Sides  **6**

Radius  **3**

Rotation Angle  **30**
and press ENTER

Press **O** key on keyboard to select
AutoCursor **Origin** override, **Fig 2**

Click **Apply** .

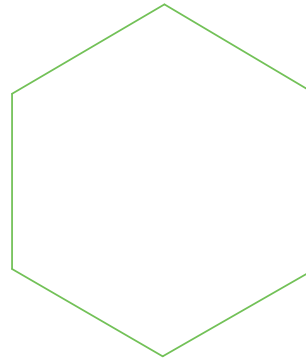


Fig. 2

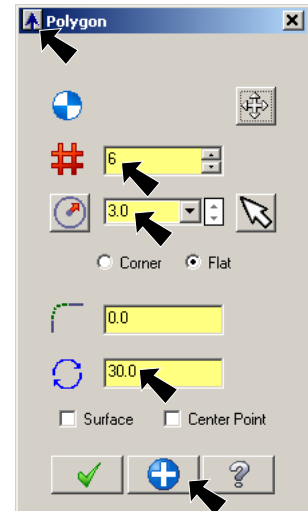


Fig. 1

Step 4. In the Polygon dialog box set:

Radius  **2** **Fig. 3**

Rotation Angle  **0**
and press ENTER

Press **O** key to select AutoCursor
Origin override, **Fig 4**

Click **Apply** .

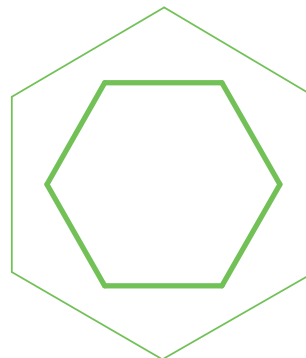


Fig. 4

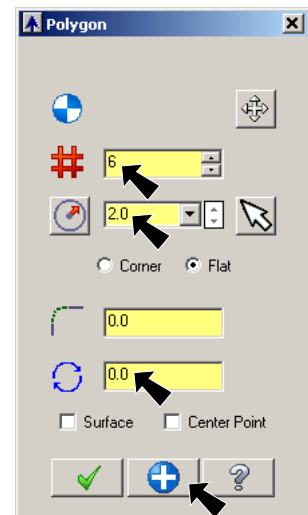


Fig. 3

Step 5. In Polygon dialog box add another with:

Radius  **.5**

Rotation Angle  **0**
remember to press ENTER and O key.

Click **OK**  when done.

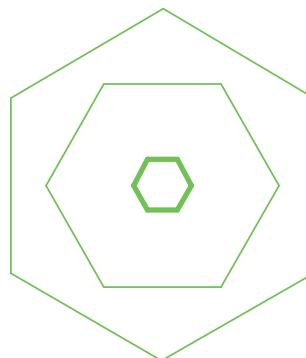


Fig. 5

Step 6. **Right click** the graphics window and
click **Fit**  (Alt-F1).

B. Save As “12 STAR”

Step 1. Click **Save As**  (Ctrl-Shift-S) on the Quick Access Toolbar QAT.

Step 2. Key-in **12 STAR** for filename and press ENTER.

C. Sketch Big Points.

Step 1. Sketch the next lines **red**. **Right click** in the graphics window and on the Mini Toolbar click **Wireframe Color**  drop down arrow, then click **red**, Fig. 6.

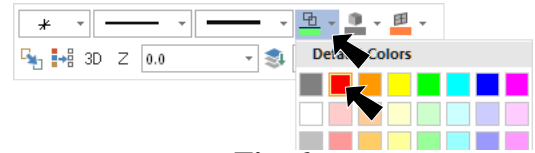
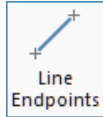


Fig. 6

Step 2. On the Wireframe tab **WIREFRAME** click **Line Endpoints** .

Step 3. Sketch a line between Position 1, an endpoint of big polygon and Position 2, an endpoint on small polygon, Fig. 7.

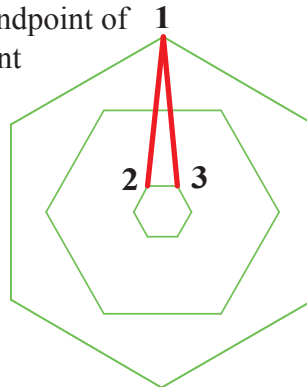


Fig. 7

Step 4. Continue and sketch points of the star from big polygon to small polygon, click Position 1 on big polygon and click Position 2 or Position 3 on small polygon, Fig. 8. When done click **OK** and **Create New Operation** .

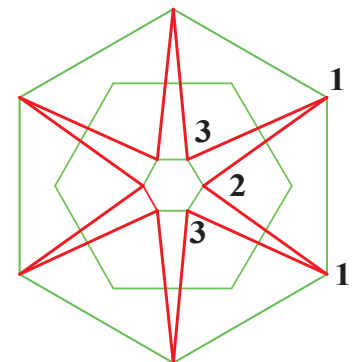


Fig. 8

Step 5. Save  (Ctrl-S).

D. Sketch Small Points.

Step 1. Sketch the next lines **yellow**. **Right click** in the graphics window and on the Mini Toolbar click **Wireframe Color**  drop down arrow, then click **yellow**, Fig. 9.

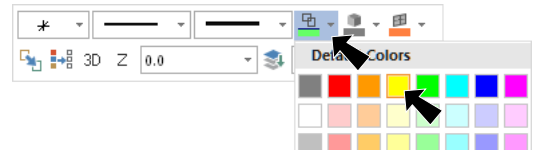


Fig. 9

Step 2. Sketch a line between Position 4, an endpoint of middle polygon and Position 3, an endpoint on small polygon, Fig. 10.

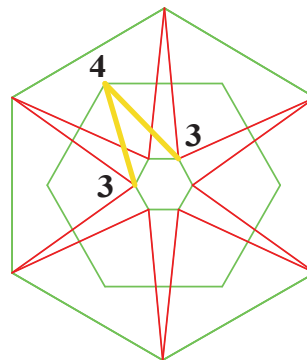


Fig. 10

Step 3. Continue and sketch the points of the star from middle polygon to small polygon, Fig. 11. Click **OK**  when done.

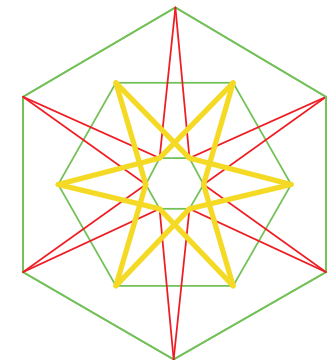


Fig. 11

Step 4. Save  (Ctrl-S).

E. Delete The Three Polygons.

Step 1. **Delete the three polygons.** To delete, click each line of the polygons and press Delete key on keyboard, **Fig. 12.**

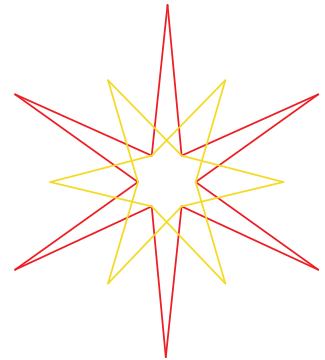
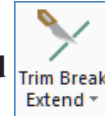


Fig. 12

F. Trim Lines.

Step 1. On the Wireframe tab **WIREFRAME** click **Trim Break Extend**



Step 2. In the Trim Break Extend function panel:
under Type, **Fig. 13**
select **Trim 1 entity**
Trim lines of short yellow lines to long red lines.
Click Position 1 on yellow line then, click Position 2 on red line,
Fig. 14.

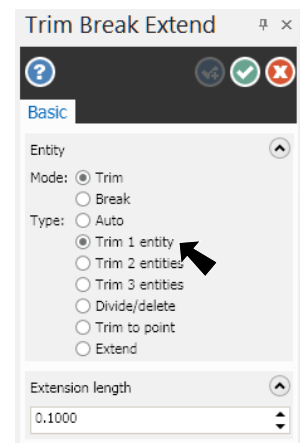


Fig. 13

Repeat at other yellow lines. That is, **click the part of line you are keeping, outside of yellow line, then click red line it crosses, Fig. 15.**

Click OK  when done.

Step 3. Save  (Ctrl-S).

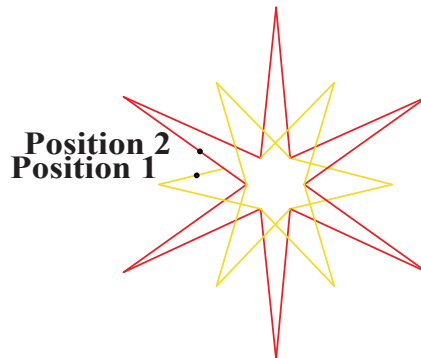


Fig. 14

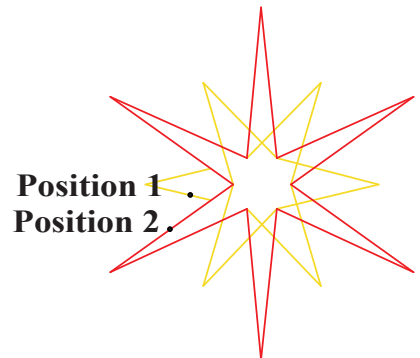


Fig. 15

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

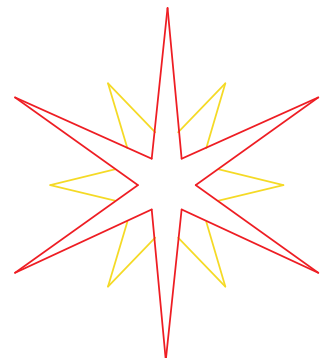


Fig. 16