### **Polygons:**

The easy way to draw little more complex form is to use the Polygon command.

A polygon is defined from a list of points.

Actually a polygon can have up to 100 points (0 to 99)

You can define 100 different Polygons, Polygon number must be between 0 and 99

They are several easy to use commands for set, move and rotate Polygons.

Syntax:

#### PolyPoint Polygon\_Number , Point\_Number , X , Y

We have to use this command to set all points from a polygon.

Polygon Number : Number from the Polygon (0 to 99)

Point\_Number : Number from the point we set the coordinate (0 to 99)

X, Y : Coordinate from this point

## PolyCenter Polygon\_Number, X, Y

We set the center point from the Polygon

This point will be used if you want rotate the Polygon

This point can be set everywhere, you don't have to place it into the Polygon itself.

Polygon\_Number : Number from the Polygon (0 to 99)

X, Y : Coordinate from the Polygon center point

# PolyMove Polygon\_Number, X, Y

Use this command for move the Polygon somewhere on the screen. It is like you move the center point and the rest of the Polygon follow it.

Polygon\_Number : Number from the Polygon (0 to 99)

X, Y : New Coordinate from the Polygon center point (All other points follow)

### Polygon Polygon\_Number, Point\_Count, outcolor[, incolor, F]

Draw a Polygon on screen.

Polygon Number : Number from the Polygon (0 to 99)

Point Count : Number of point defining this polygon, if you have defined point 0 to 23 then

This polygon have 24 points.

Outcolor : border color Incolor : fill color

F : The polygon is filled 'optional'

### RotatePoly Polygon\_Number , Point\_Count , angle , outcolor [ , incolor , F]

Draw a Polygon rotated to the given angle.

The Polygon will rotate around his Center point defined with the

PolyCenter command.

Polygon\_Number : Number from the Polygon (0 to 99)

Point Count : Number of point defining this polygon, if you have defined point 0 to 23 then

This polygon have 24 points.

Angle : angle we rotate the polygon

Outcolor : border color Incolor : fill color

F : The polygon is filled 'optional'

## Polygon Examples:

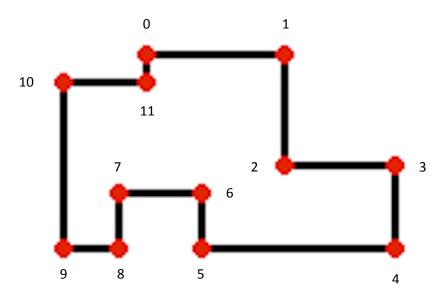
Point 0 to 11 define this Polygon, it's a 12 points Polygon

PolyPoint 0,0,100,20 set the point 0 from polygon 0 to coordinate 100 , 20 PolyPoint 0,1,200,20 set the point 1 from polygon 0 to coordinate 200 , 20

....

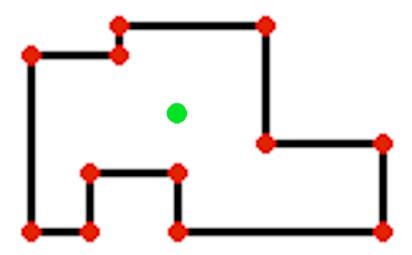
PolyPoint 0,11,100,30 set the point 11 from polygon 0 to coordinate 100,30

You will get a polygon with this form.



Now we are going to set the Center from the Polygon , or if you prefer the coordinate from where the Polygon can be rotated

PolyCenter 0,140,60 set the Center point to coordinate 140,60



The polygon is now complete and can be drawn on screen with:

Polygon 0,12,Red

draw the 12 points polygon 0 with Red outer line

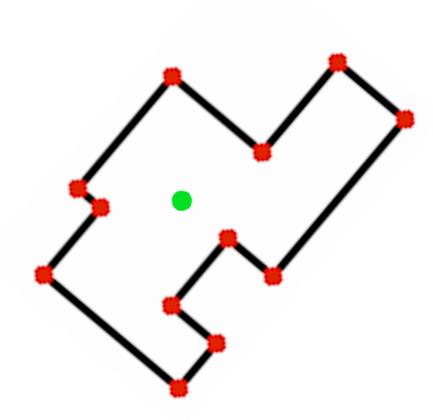
Polygon 0,12,Red,Blue,F

draw the 12 points polygon 0 with Red outer line and Filled with Blue color.

You can also Rotate the polygon like this:

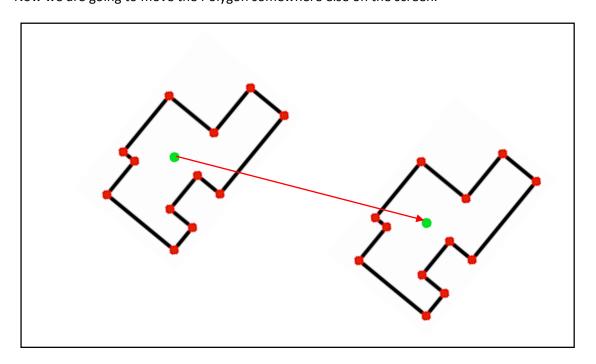
PolyRotate 0,12,45,Red

It will show the polygon rotated to 45 degrees around the center point.



Note that the center point is invisible and just drawn here for information.

Now we are going to move the Polygon somewhere else on the screen.



PolyMove 0,340,150 Move the polygon from the original 140,60 coordinate to 340,150 coordinate. This will move the Center point with the Polygon For move the Center point alone use the PolyCenter command.