



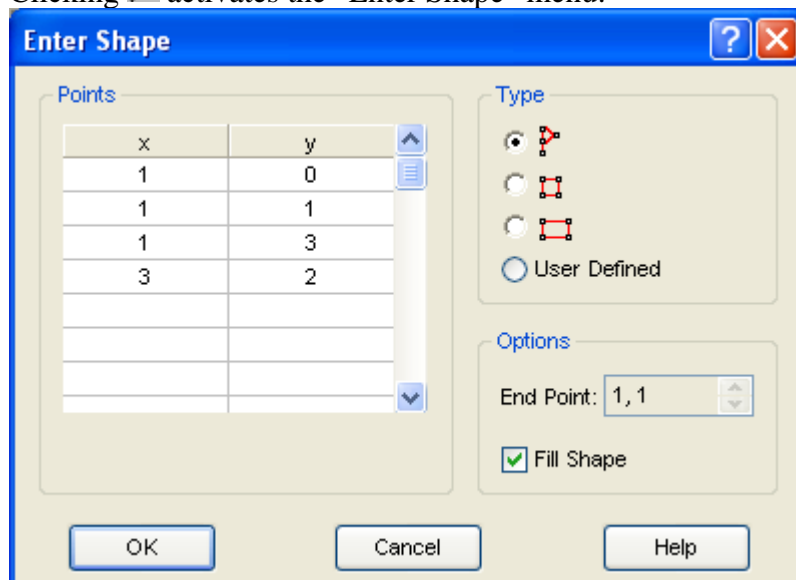
## Transformations in Autograph

Autograph allows polygons to be drawn and transformed with the basic transformations.


NB “Equal aspect” mode  is helpful to ensure that the axes are “square”.

### Drawing a polygon

Clicking  activates the “Enter Shape” menu:





A flag, square, rectangle or other shape can be chosen and the points can be edited.


Once drawn the shape can be moved by clicking and dragging. Dragging in the middle will move the whole shape, dragging a point will just move that point. The cursor  should be selected for this to work.

### Transformations

Reflections in the axes, and shears and stretches along the axes can be obtained by right-clicking on the shape or selecting the **Object** menu.

Enlargements and rotations must be centred on a point.

Enter a point by using  and clicking on the screen  
or  and entering the co-ordinates.

(Remember to return to Cursor mode: )

Select both the shape and the point (select one, hold shift and select the other).

Enlargements and rotations can be selected by right-clicking or selecting the **Object** menu.

To obtain a reflection in a line, other than the axes, draw a shape and a line, select both, and then right-click or select the **Object** menu.