

## Axis labelling

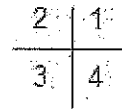
Along each axis you will see small tic marks with numbers. These are labels to help judge the scale. They are shown every 5 units in the figure above, but can be any increment, and need not be the same on both axes.

## Origin

The point where the two axes cross (at zero on both scales) is called the origin. The origin is the point from which all distances along the x and y axes are measured. In the figure above you can drag the origin point to reposition it to a more suitable location at any time.

## Quadrants

The two axes divide the plane into four areas called quadrants. The first quadrant, by convention, is the top right, and then they go around counter-clockwise. In the diagram above they are labelled Quadrant 1,2 etc. It is conventional to label them with numerals but we talk about them as "first, second, third, and fourth quadrant". They are also sometimes labelled with Roman numerals: I, II, III and IV.



In the diagram above, you can drag the origin all the way into any corner and display just one quadrant at a time if you wish.

## Things to try

In the figure at the top of the page, first press 'reset'.

- Drag the origin point around, including dragging it all the way into a corner to show only one quadrant.
- Drag the point A into each quadrant. The first number after the A is the x-coordinate and the second the y-coordinate. Note how the signs of each change in each quadrant. For more on this see [Coordinates of a Point](#)