

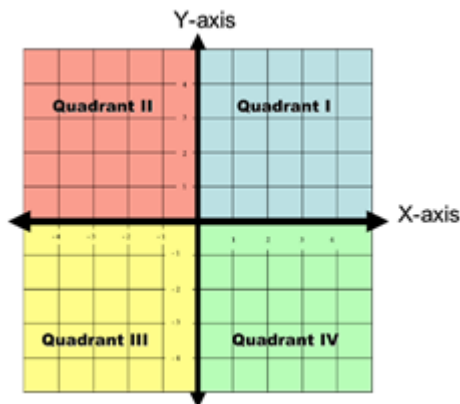
L.O: I am learning to identify and read positions in the first quadrant using coordinates

Today you will learn how to apply your knowledge of properties of shapes to find missing angles. You will use square grids to help you reason about lengths and angles. You will learn to identify right angles and understand how many degrees half a right angle is.

Answer the questions on the separate worksheet that comes with this assignment. Turn the completed work in so that the teacher can mark and comment on your work.

What is a Quadrant?

The word “quadrant” comes from the latin word for “four” and it means something that is divided into 4; 4 parts or quarters. In maths it refers to the four parts of a coordinate plane.(See diagram below)



Today we are focusing on the first quadrant only and will be using the x and y axes to read and identify coordinates on the first quadrant.

The Correct Order of Axes

As you can see from the diagram, the direction of the x axis is **horizontal** and the direction of the y axis is **vertical**. Coordinates are written and read with the x axis first, followed by the y axis. For example (5,2). This means that you move along the x axis from the origin, to plot the point 5 (5 squares along) and then move up the y axis 2 squares on the grid to plot the point 2.

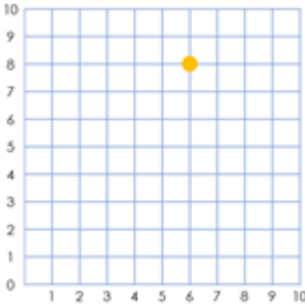
A simple way to remember the correct order of the axes is to say “**along the hall and up the stairs**” meaning you walk **horizontally** along the hall (**x axis**) and then **vertically** up the stairs (**y axis**)

The Origin

The Origin is the point where both axes meet and is labelled (0,0). You always start from the origin when plotting or reading coordinates.

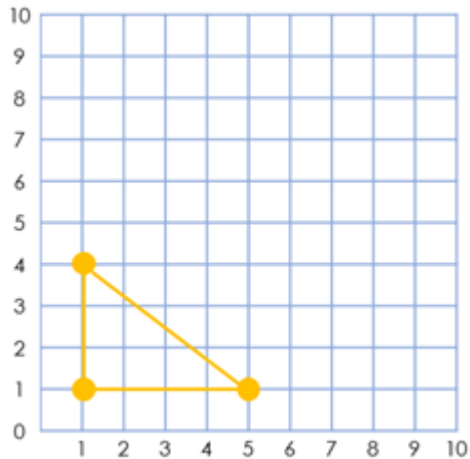
Let's Practise

What are the coordinates of this point?



From the origin, move horizontally along the x axis to point 6 (in line with the yellow point). From the origin, move vertically up the y axis until you are in line with the yellow point at 8. The coordinates for this point are **(6,8)**

We can read or plot more than one set of coordinates at a time, creating a shape. What are the coordinates of this triangle?

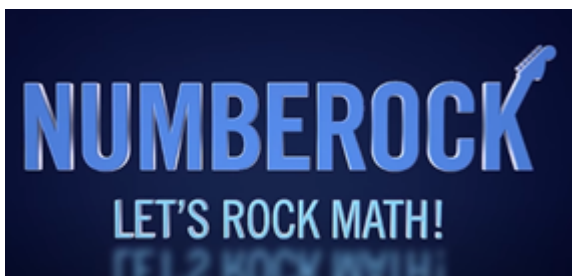


The triangle has 3 sets of coordinates:

- (1,1) (1,4) (5,1)

Remember to write the **x axis first, y axis second**.

Now watch the video below to help before moving on to today's tasks on the worksheet.



<https://www.youtube.com/watch?v=d6vhjpnfd3c>