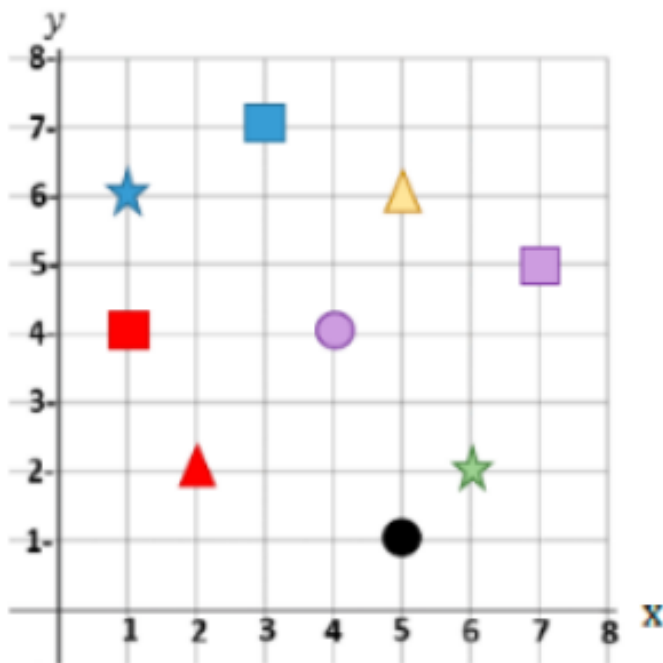


# Year 4 Position and Direction

Key Vocabulary
position
direction
quarter turn
half turn
three-quarter turn
whole turn
straight line
rotation
order
arrange
patterns
sequences
co-ordinates
first quadrant
grid
translation
plot
polygon
axis



The red triangle is at (2, 2)  
 The purple square is at (7, 5)  
 The blue star is at (1, 6)



When you are using coordinates you always read or write the number on the x-axis before the y-axis.

A good way to remember which axis is which, is the rhyme 'y to the sky!'



To write a coordinate you put the x and y position within brackets with a comma.

(5, 1)  
 ↗ ↖  
 x axis y axis

When writing or reading coordinates, a good way to remember which to read or write first is to use 'along the corridor and up the stairs.'  
 You move along the x-axis and up the y-axis.



## Key Vocabulary

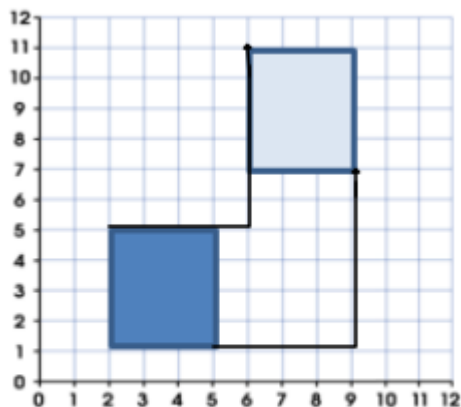
- position
- direction
- quarter turn
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## Translation

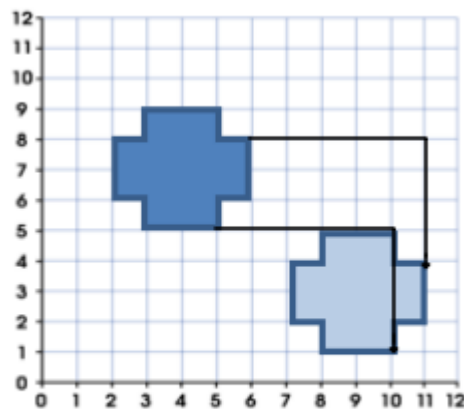


**Translation** is the process of moving an object around a grid. When moving the object, the size does not change and you do not turn or reflect it.

You can translate objects left, right, up or down around a grid.



This shape has translated  
**4 right, 6 up**



This shape has translated  
**5 right, 4 down**

## Plotting 2D Shapes

When plotting a 2D shape, each corner (vertex) has a coordinate on the grid.

