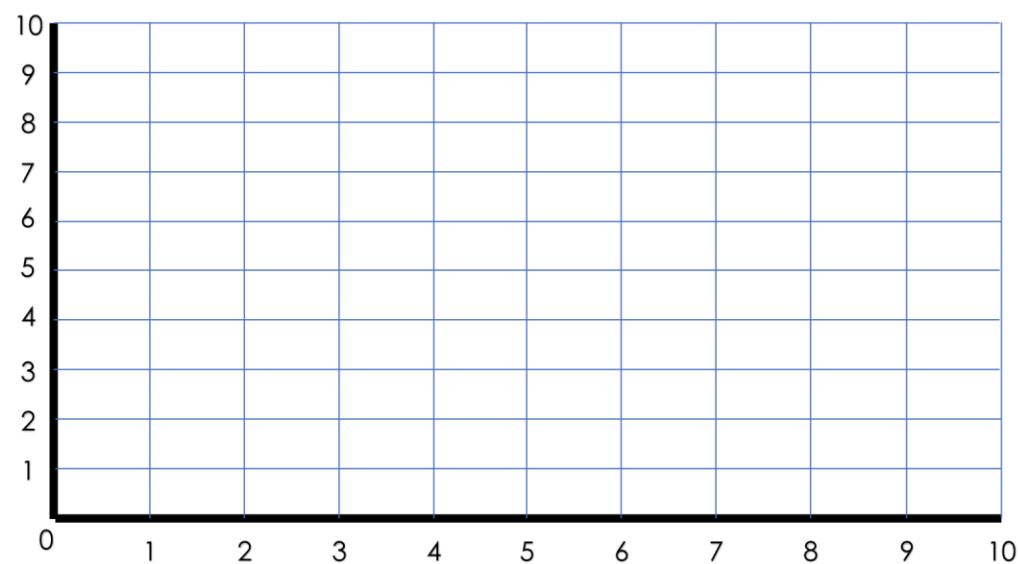
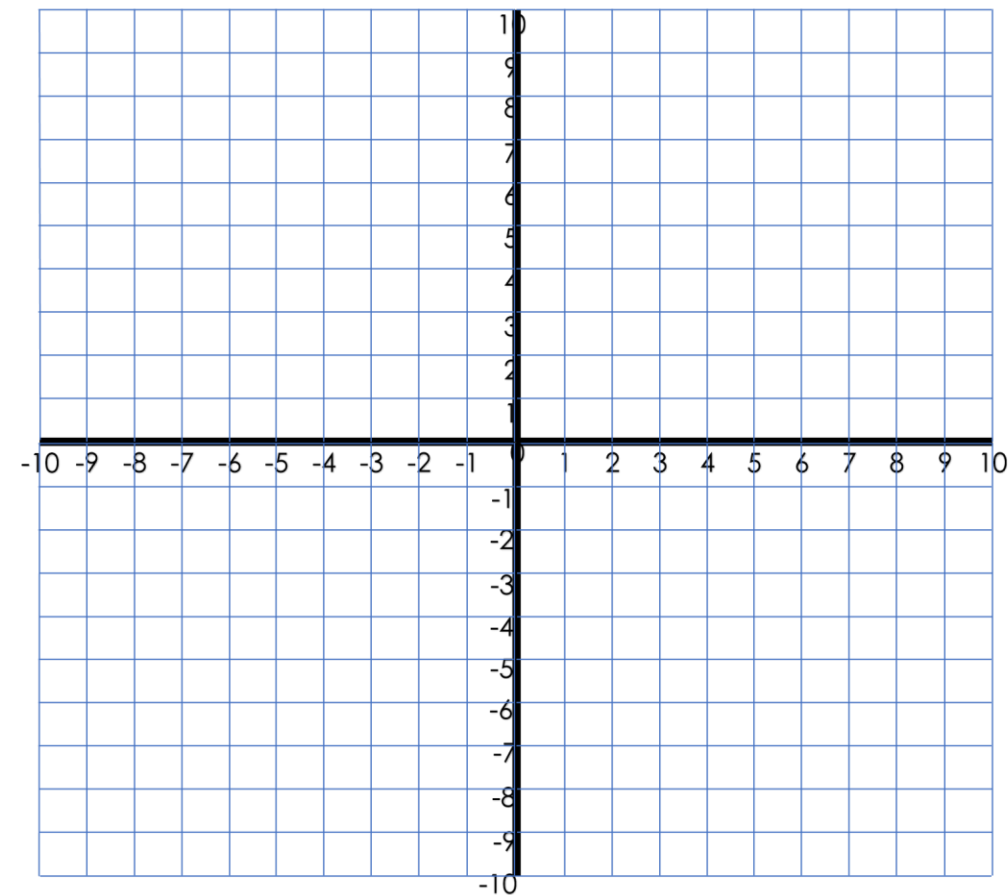


Position and Direction

First quadrant:



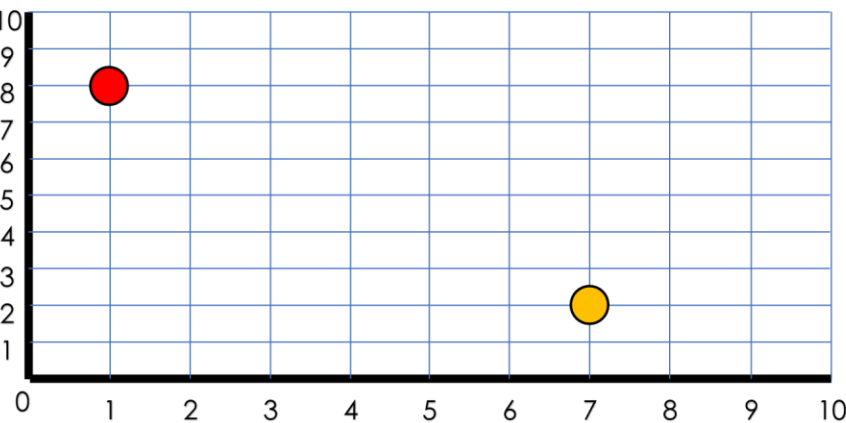
All four quadrants:



Reading and plotting coordinates:

We read and plot coordinates by going along the x-axis (horizontal) first and then up or down the y-axis (vertical) after.

The coordinates are placed in commas and have a comma to separate the numbers.



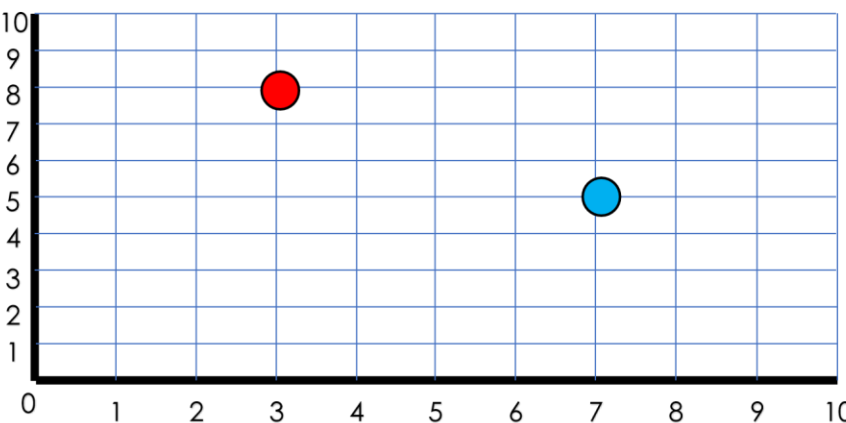
For example:

● = (1,8)

● = (7,2)

Translation:

When we translate something, it means we have moved it. We can then use the coordinates or position on the grid to consider how it has moved. We describe it by using up, down, left and right.



For example, if we considered the translation from the red circle to the blue circle, we would say it has moved 4 right and 3 down or 3 down and 4 right.



Key Vocabulary



Coordinates – A group of numbers used to indicate the position of a point, line or plane

Horizontal – Parallel to the plane of the horizon; at a right angle to the vertical

Plot – Mark a position on a chart or graph

Reflect – To show an image of something

Translate – Move from one place to another

Vertical – An upright line where the top is directly above the bottom

Reflection:

When we reflect a shape, we use a mirror on a given line and see how the shape would reflect in the opposite quadrant.

For example, we might ask to reflect the blue rectangle in the y-axis. This would mean putting a mirror along the y-axis and seeing what the shape would look like and drawing it on the opposite side, as shown by the red rectangle.

