Home Learning Tuesday 23rd June 2020 Maths

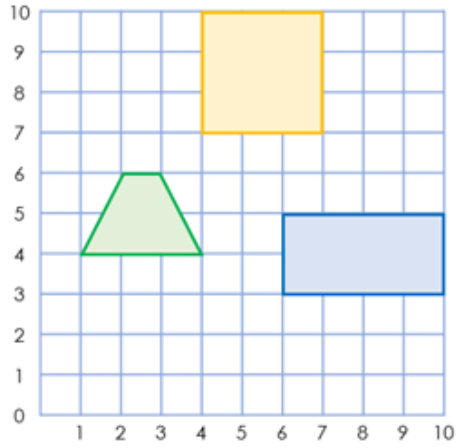
L.O: I am learning to translate coordinates on a grid.

Today you will learn to translate coordinates on a grid. You will learn to describe translations of coordinates and understand the effect of the translation on both the x and y coordinates.

Answer the questions on the separate worksheet that comes with this assignment. Answers are provided for you to self-mark your work before you submit it to the teacher for checking.

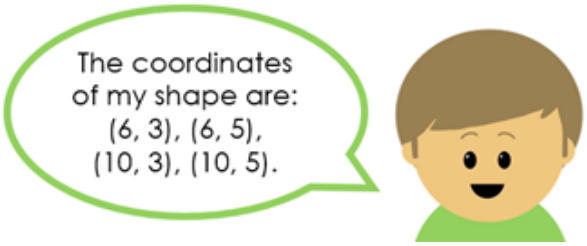
Starter

Let's review what we learned yesterday about translating shapes on a grid.



What shape did Jerry draw on the grid?

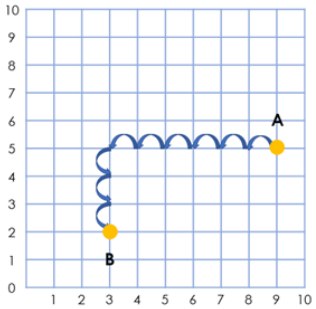
What are the coordinates of the other shapes?



Did you find Jerry's shape? It was the **blue rectangle**.
Now find the coordinates of the trapezium and the square.

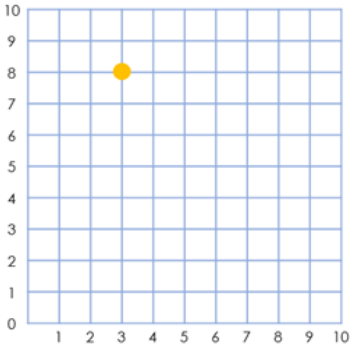
Translating with coordinates

We can use our understanding of the translation of shapes to translate individual coordinates.



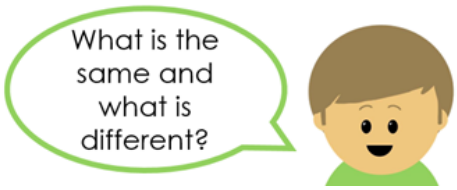
Point A (9,5) was translated **6 squares left** and **3 squares down**. It is now at **point B (3,2)**

Let's Practise



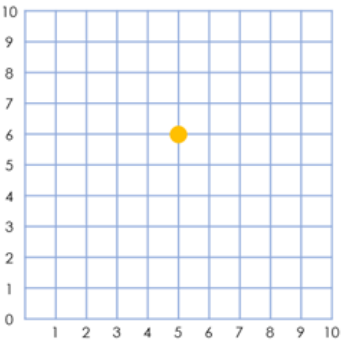
Help Jerry translate the point 7 squares right.

Now compare the original coordinates with the new coordinates.



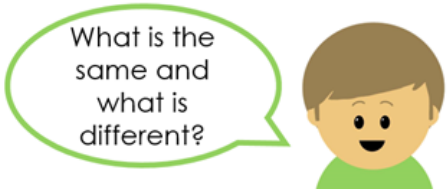
You can work out the translated coordinates by counting, without drawing on the grid. The original coordinates are (3,8). If you move left or right you count on the **x axis**. So 7 squares right would be 10 on the x axis (3+7 = 10). The position on the y axis doesn't change because you have not moved up or down. Therefore the new coordinates are (10,8).

- SAME: the y axis coordinate has not changed
- DIFFERENT: the x axis coordinate has changed, the point has moved to the right.



Help Jerry translate the point 3 squares down.

Now compare the original coordinates with the new coordinates.



This time we are translating the point DOWN, not left or right, so we will only be changing the **y axis** coordinate. The original coordinates are (5,6). Counting down on the y axis, the new coordinates are (5,3) The position on the x axis doesn't change because you have not moved left or right.

If you need more practise, check out this online lesson before starting the tasks.

https://www.thenational.academy/year-5/maths/an-introduction-to-translation-year-5-wk1-1

Now go to the worksheet for today's tasks and choose your challenge!