Home Learning Tuesday 23rd June 2020 Maths

Worksheet

Answer the questions on this worksheet in the boxes next to the challenge questions.

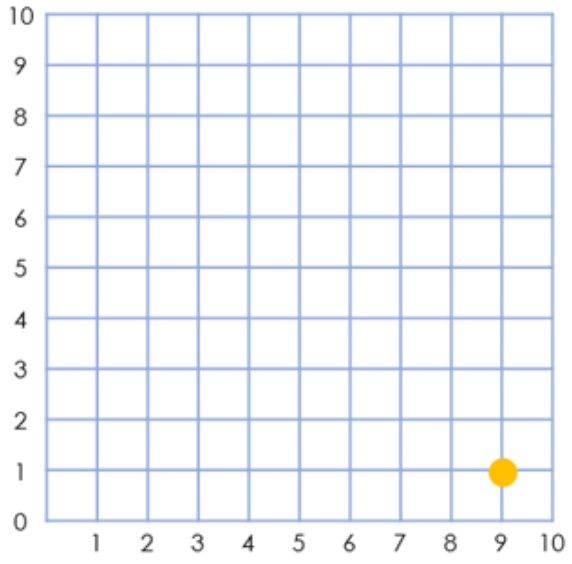
Remember:

The tasks are arranged in 3 challenges that get progressively more difficult.

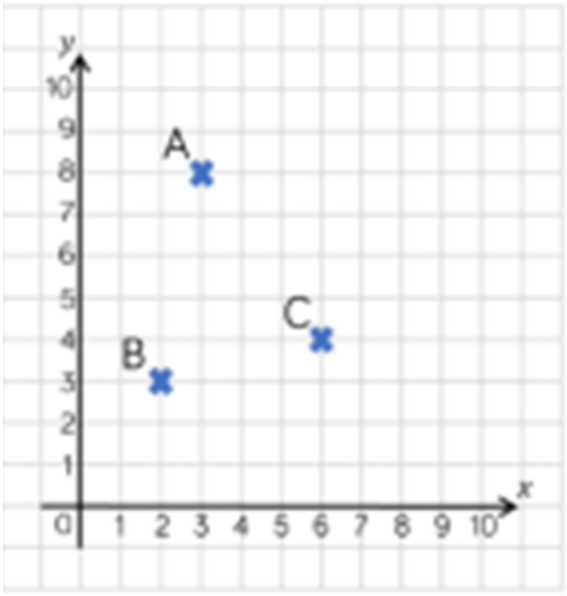
- Challenge 1 is a “mild” challenge, if you are not confident
- Challenge 2 is “spicy”, a little bit more challenging, if you are feeling confident and find the first challenge too easy.
- Challenge 3 is “hot”. The questions are designed to challenge you and can be tricky.

You can choose to do just one challenge or more than one, it is up to you. As a guide, if you are consistently getting everything correct, you should move up a challenge. If you are struggling on every question; move down a challenge.

Challenge 1:

Question	Answer
1. Jerry moved his point 5 squares left and 8 squares up, what will his new coordinates be? 	

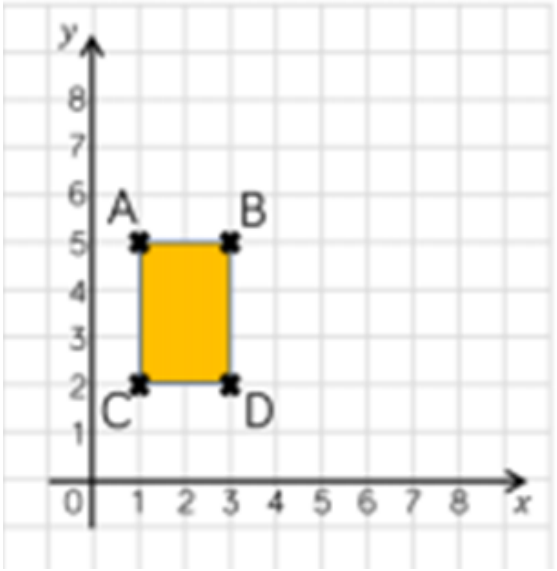
2. Translate each coordinate 2 down, 1 right. Record the coordinates of the new position.



	Before translation	After translation
A	(3, 8)	
B		
C		

Challenge 2:

Question	Answer
1. Rectangle ABCD is translated so vertex C is translated to (3, 5). Describe the translation. What are the coordinates of the other vertices of the translated rectangle?	



2.

Match the coordinates to their translation instruction and new position.

(4, 3)	1 left 3 down	(8, 9)
(10, 4)	6 right 2 down	(9, 1)
(4, 4)	5 right 5 up	(10, 1)
(11, 5)	3 left 4 up	(9, 9)

3.

Point M has the coordinates (12, 19).

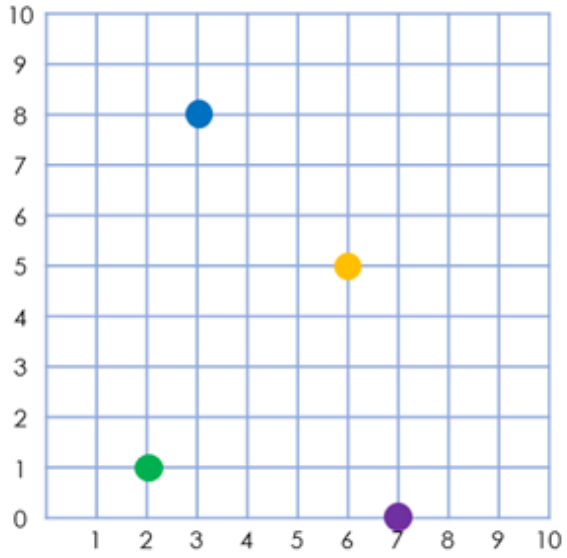
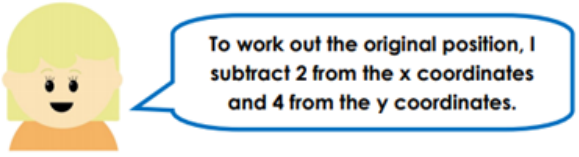
It is translated 21 right and 9 down.

Alex and Amir are working out the coordinates of the translated points. Here are their answers.

Alex (3, 38) **Amir** (33, 10)

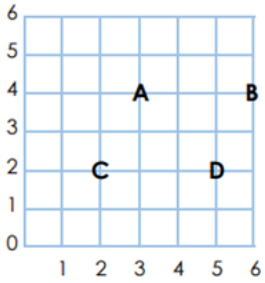
Who do you agree with? _____

Challenge 3:

Question	Answer
1.All of the points have been translated 3 squares left and 2 squares down. Can you find their original positions? Explain how you did it.  	
2. **Jane has been given the coordinates of a right-angled triangle which has been translated 2 squares right and 4 squares down.**   **Prove why she is incorrect!**	
3.	

Caleb is translating the points of a parallelogram 2 squares left and 1 square up.

The new coordinates are...
(5, 1) (5, 4) (3, 3) (3, 0)



Do you agree?

Explain why / why not.