

Worksheet

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

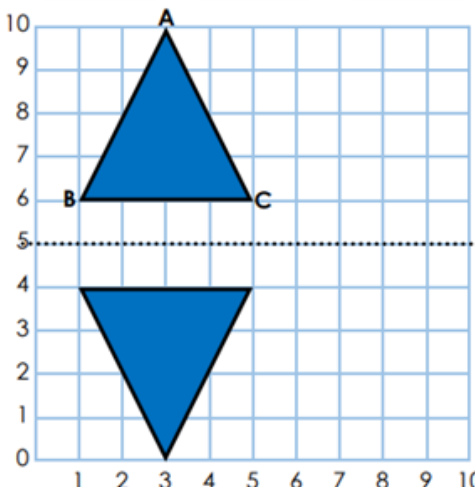
Remember:

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

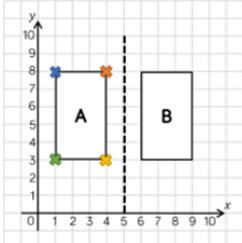
- Challenge 1 is a “mild” challenge, if you are not confident
- Challenge 2 is “spicy”, a little bit more challenging, if you are feeling confident and find the first challenge too easy.
- Challenge 3 is “hot”. The questions are designed to challenge you and can be tricky.

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
<p>1.</p> <p>Write the coordinates of the shape before reflection.</p> <p>A (,) B (,) C (,)</p>  <p>NOW Write the coordinates of the reflected shape.</p> <p>A (,) B (,) C (,)</p>	
2.	

Object A is reflected in the mirror line to give image B.
Write the coordinates of the vertices for each shape.



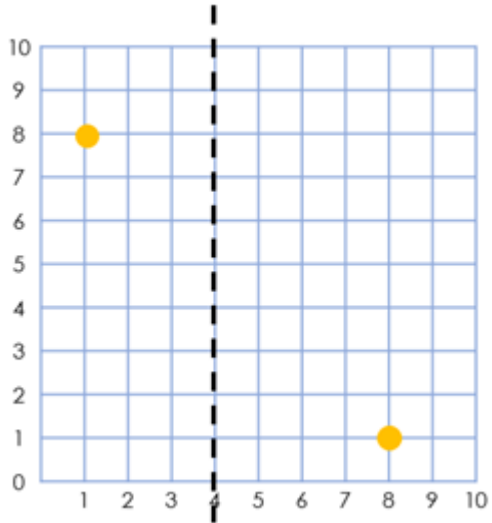
	Original Coordinate	Reflected Coordinate

Challenge 2:

Question	Answer
<p>1.</p> <p>Read and check these coordinates on the grid...</p> <p>(1, 3) (7, 2) (10, 6) (4, 9) (0, 8) (9, 4) (3, 5)</p> <p>Which coordinate has not been plotted?</p>	
<p>2.</p> <p>Eva reflects the shape in the mirror line. She thinks that the coordinates of the vertices for the reflected shape are:</p> <p>(5, 5) (2, 5) (2, 9)</p> <p>Is Eva is correct? Explain why.</p>	
<p>3. Caleb thinks that if he reflects the coordinates and joins them together, they will form a rectangle.</p>	



Do you agree with him?



Explain your thinking.

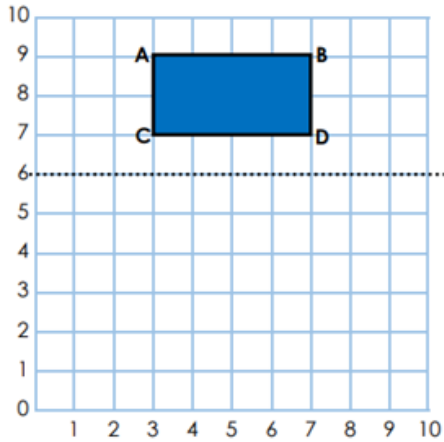
Challenge 3:

Question	Answer
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1.

Write the coordinates of the shape before reflection.

A(,) B(,) C(,) D(,)



NOW Draw the reflected shape and write the coordinates.

A(,) B(,) C(,) D(,)

2.

Is Ranjit correct? Prove it!



When coordinates are reflected in a mirror line, they will change.

3.

Convince Me!

You can work out the set of reflected coordinates without drawing them on the grid.

