

Lesson 2

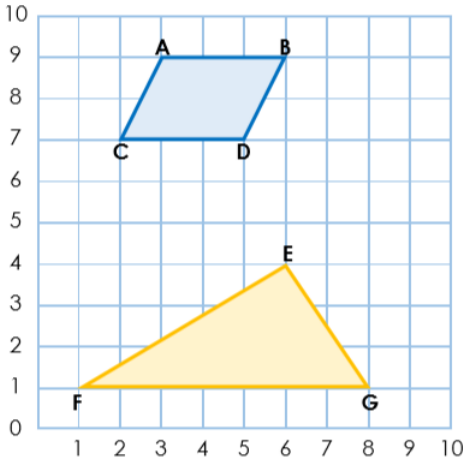
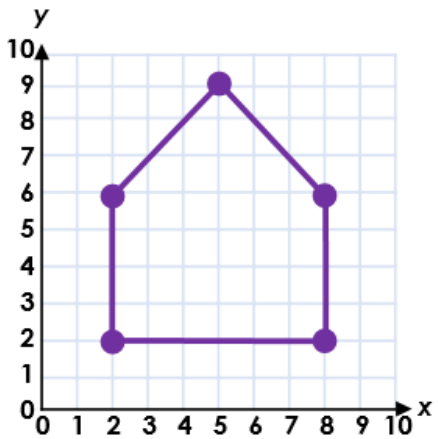
L.O I am learning to read and plot co-ordinates in the first quadrant.

All	All of you must complete the fluency section.
Most	Most of you will complete the fluency and reasoning sections.
Some	Some of you will complete the fluency, reasoning, and problem-solving sections.

Try your best – it is all we can ask for! 😊

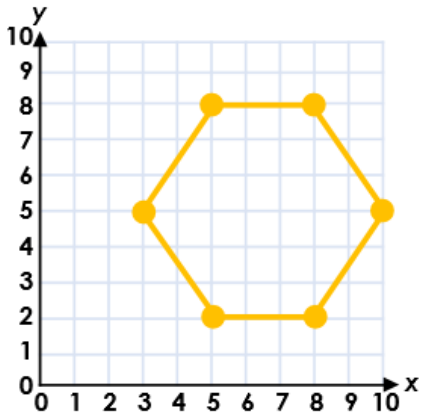
This video may help if you are stuck at any point:

Fluency

	Your answer
<p>1. Write the coordinates of the shapes.</p> <p>A <input type="text"/> <input type="text"/> B <input type="text"/> <input type="text"/> C <input type="text"/> <input type="text"/> D <input type="text"/> <input type="text"/></p>  <p>E <input type="text"/> <input type="text"/> F <input type="text"/> <input type="text"/> G <input type="text"/> <input type="text"/></p>	<p>A – 3, 9</p> <p>B – 6, 9</p> <p>C – 2, 7</p> <p>D – 5, 7</p> <p>E – 6, 4</p> <p>F – 1, 1</p> <p>G – 8, 1</p>
<p>2. True or False? The coordinates of the pentagon are:</p> <p>(7, 4) (5, 2) (5, 6) (2, 2) (2, 6)</p>  <p><input type="checkbox"/> VF</p>	<p>False, the coordinates of the pentagon are:</p> <p>(2,2), (2,6), (5,9), (8,6), (8,2)</p>

3. True or False? The coordinates of the hexagon are:

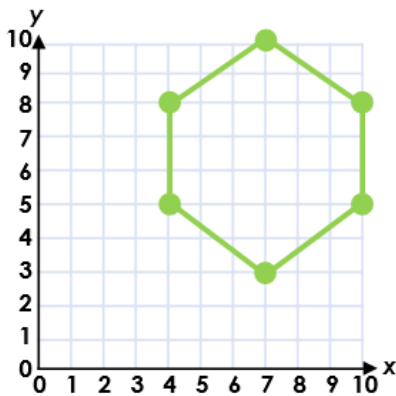
(10, 5) (3, 5) (8, 2) (5, 8) (5, 2) (8, 8)



VF

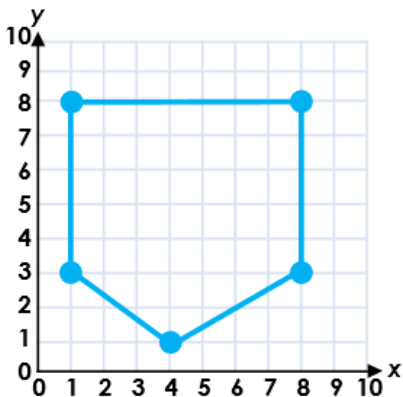
True

4. Write the coordinates of the hexagon.



(7,3), (4,5), (4,8), (7,10), (10,8), (10,5)

5. Write the coordinates of the pentagon.



(4,1), (1,3), (1,8), (8,8), (8,3)

Reasoning and Problem Solving

Key vocabulary: coordinates

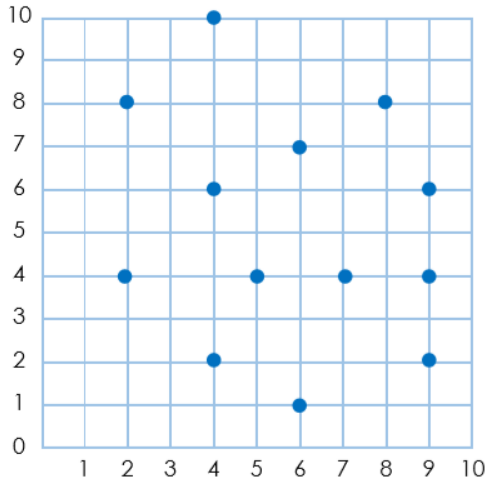
REASONING 1

Jane and her brother plotted coordinates on a grid.



My points create a rectangle.

Which coordinates did Jane plot? Prove it.



Your answer

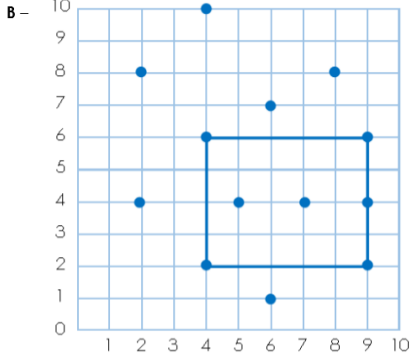
Reasoning 1

Pupil responses should show that Jane plotted the coordinates (9, 2), (9, 6), (4, 2) and (4, 6).

Modelled DAB Reasoning Responses

D – Jane plotted the coordinates (9, 2), (9, 6), (4, 2) and (4, 6).

A – These are the only 4 points which could be joined to form a rectangle.



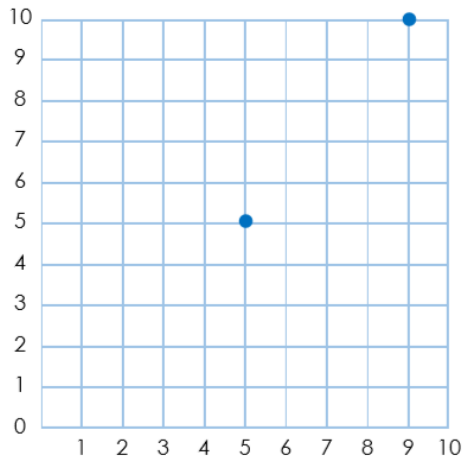
REASONING 2

Alfie is drawing a right-angle triangle on the grid.



My final point could be (5, 9).

Do you agree with him? Explain why.



Reasoning 2

Pupil responses should show that they do not agree with Alfie.

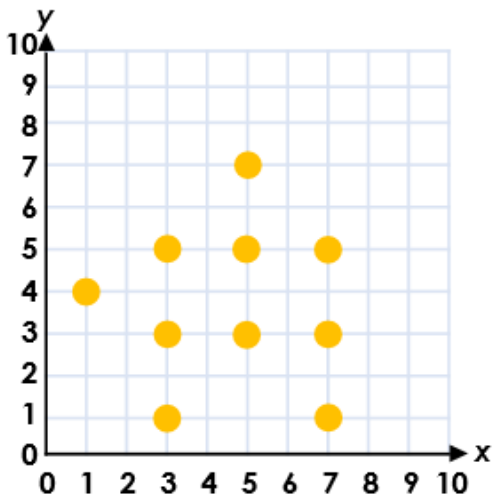
Modelled DAB Reasoning Response

D – I do not agree with Alfie.

A – His final point could not be (5, 9).

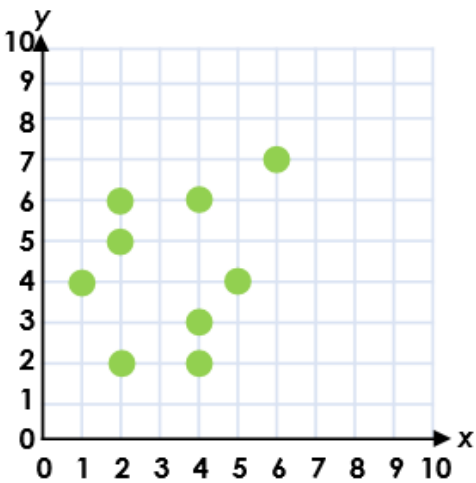
B – If Alfie plots (5, 9) then he will not form a right-angle triangle. His final point could only be (5, 10) or (9, 5).

3. Which coordinates could be joined to create a pentagon?



Various answers, for example: (3, 3), (3, 5), (5, 7), (7, 5), (7, 3)

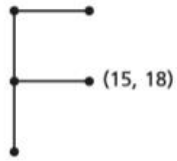
4. Which coordinates could be joined to create a hexagon?



Various answers, for example: (2, 2), (1, 4), (2, 6), (4, 6), (5, 4), (4, 2)

Extension

Eva has drawn an F on a coordinate grid. One point is labelled. Suggest possible values for the other points and label them on the diagram.

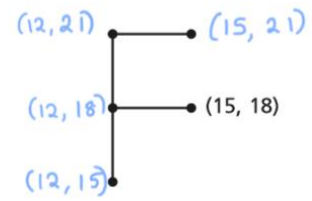


Compare answers with a partner.

Is there more than one possible set of answers?

Eva has drawn an F on a coordinate grid. One point is labelled.

Suggest possible values for the other points and label them on the diagram. *Various answers e.g.*



Compare answers with a partner.

Is there more than one possible set of answers?