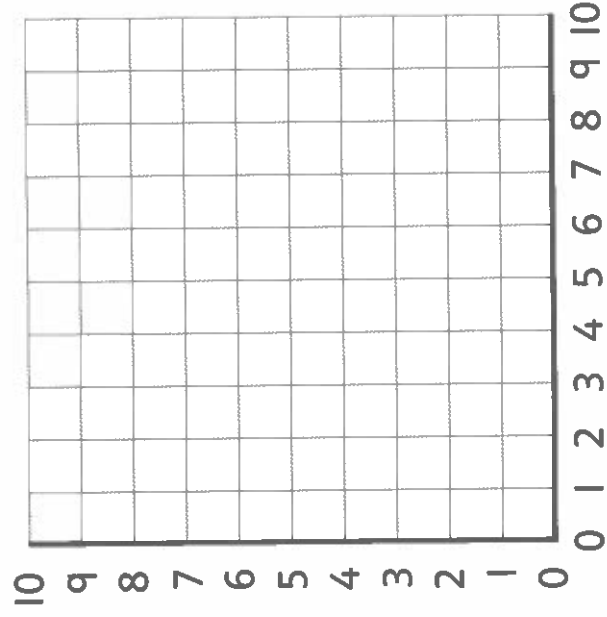


- 4 a) Draw a design for a star shape on this grid.



- b) Write the coordinates of all the vertices.

Reflect

(3,9) and (3,5) are two points on the same straight line. Is the line horizontal or vertical? Explain your answer.

• _____

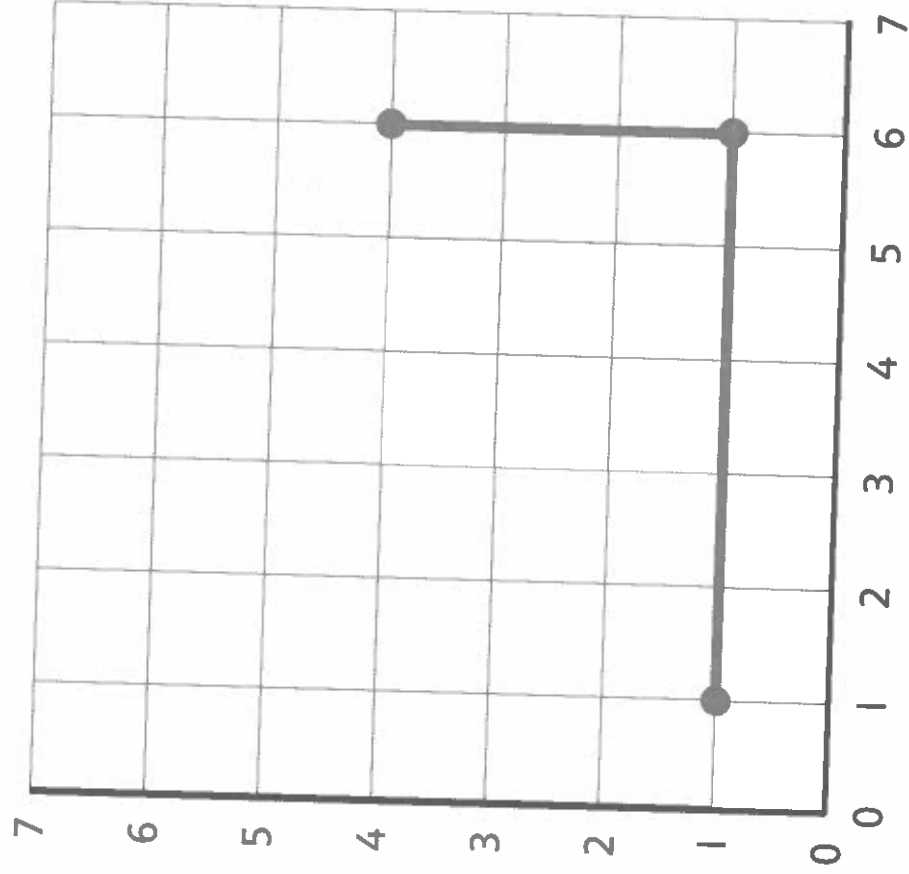
• _____

• _____

• _____

Reasoning on a grid

- 1 Amelia is drawing a rectangle.



Complete the rectangle and write the coordinates of all four vertices.

(,).

(,).

(,).

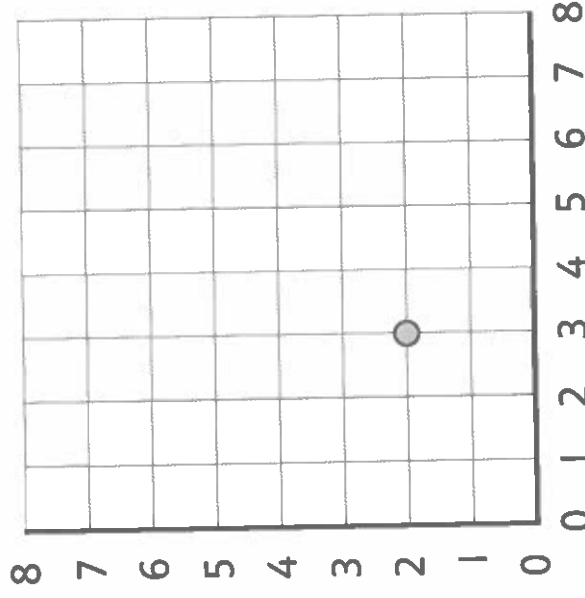
(,).

2 Mo is drawing a square on the grid with sides 4 units in length. He has already plotted a point for the bottom left corner of the square.

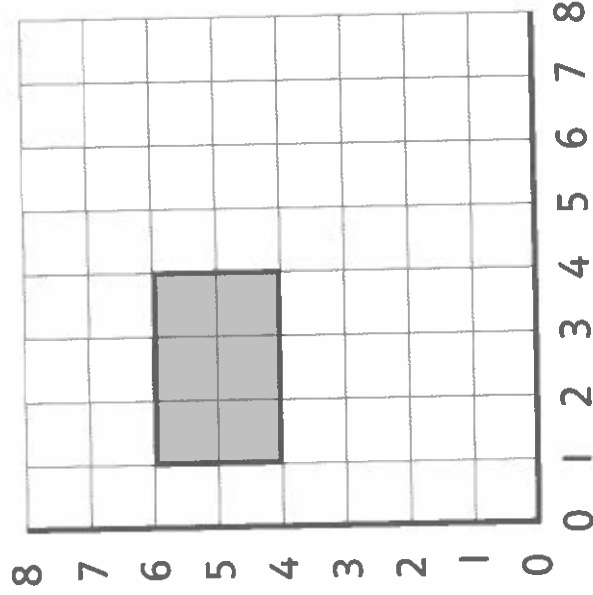
a) Can you work out the coordinates of the other corners of the square without drawing it? They are:

(,), (,)
and (,).

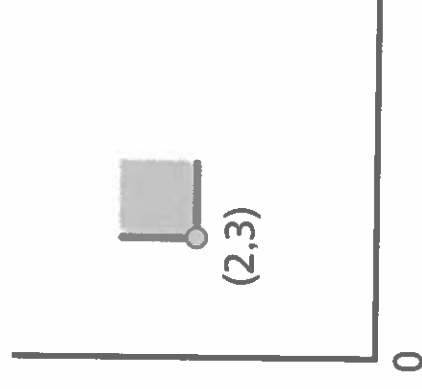
b) Draw the square and check your answers.



3 Carrie draws three more rectangles exactly the same size as this one. Every rectangle has a corner at (4, 4). Draw what the three other rectangles could be.



4 This is part of a shape.



a) What are the coordinates of the other vertices if the shape is a square with sides of 6 units?

(,), (,) and (,).

b) What are the coordinates of the other vertices if the shape is a rectangle with sides 5 and 7? (There is more than one answer.)

Answer 1: (,), (,) and (,).

Answer 2: (,), (,) and (,).

Reflect

Apart from coordinates, what other mathematical knowledge did you use in this lesson? How did you use this knowledge to answer questions on coordinates?

