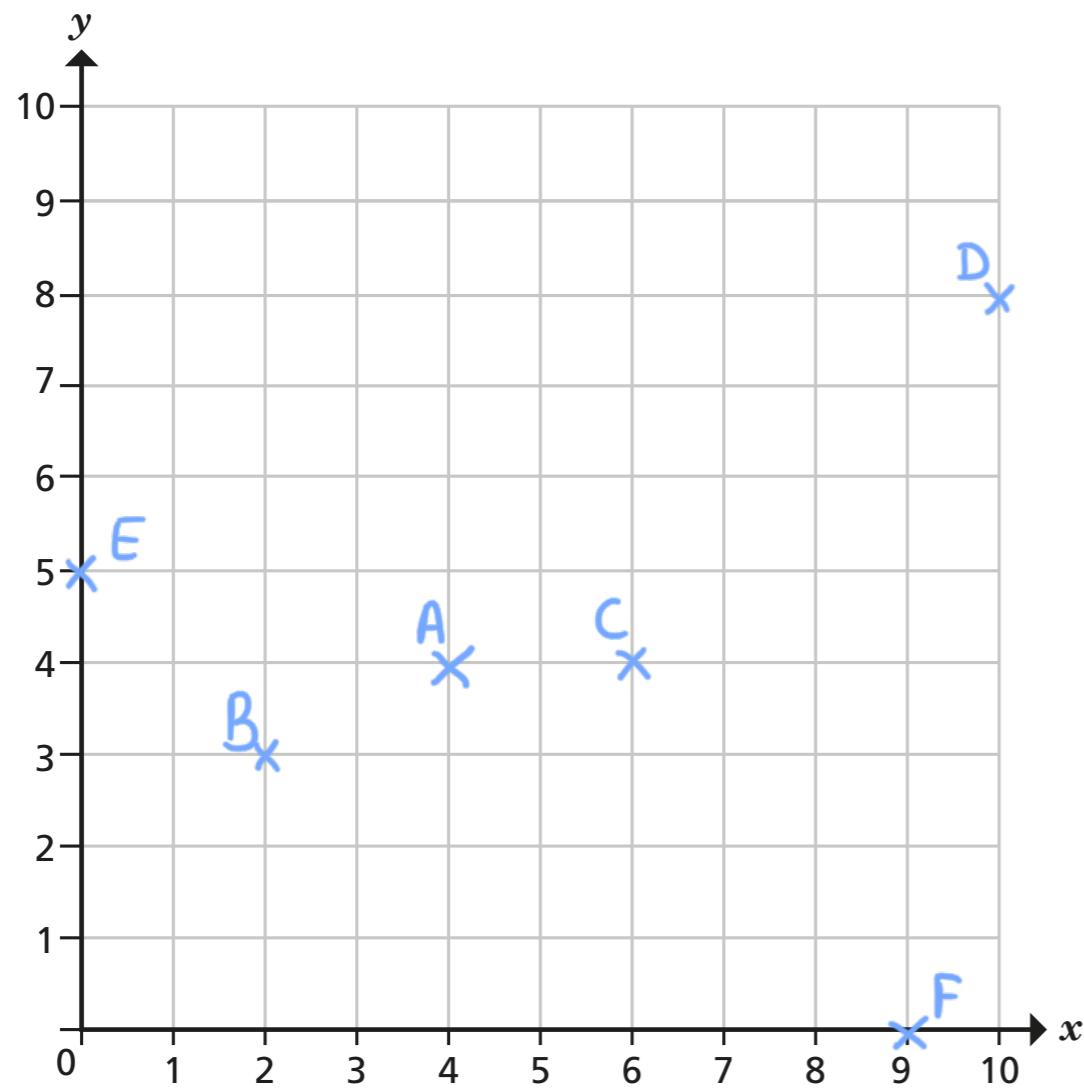White Rose Maths

1 The cards show the coordinates of six points.

| A (4, 4) | B (2, 3) | C (6, 4) |

| D (10, 8) | E (0, 5) | F (9, 0) |

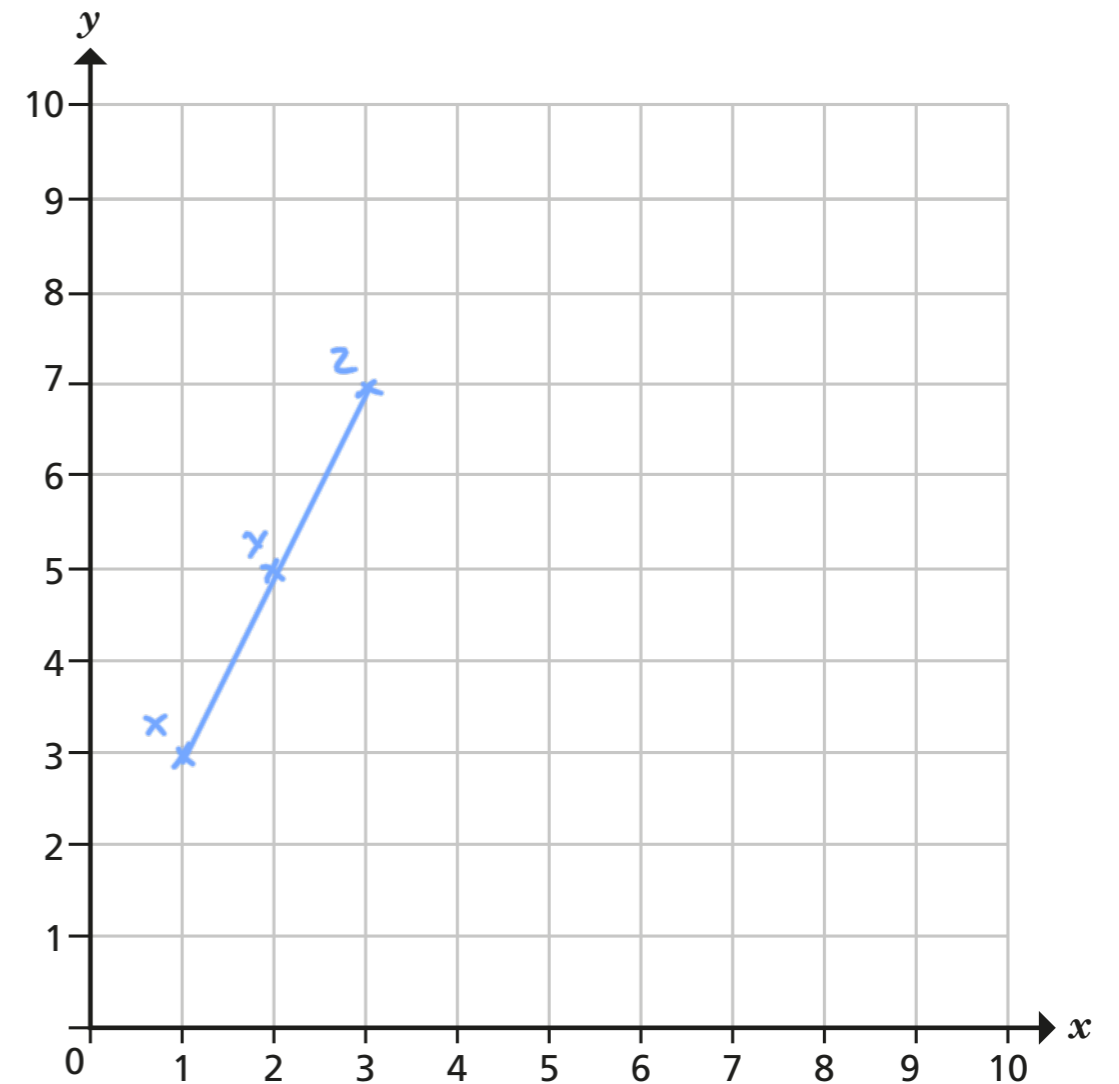Plot and label the points on the grid.

Compare answers with a partner.

2 Here are the coordinates of three points.

| X (1, 3) | Y (2, 5) | Z (3, 7) |

a) Plot and label the points on the grid.

b) Join up the points.

What do you notice?

c) Write the coordinates of two other points that fit this pattern.
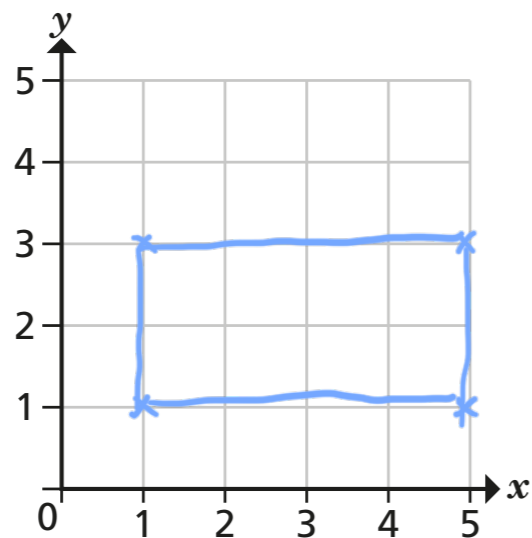
e.g. (0 , 1) and (4 , 9)

Compare answers with a partner.

3 Here are the coordinates of the vertices of a rectangle.

| (1, 1) | (5, 1) | (1, 3) | (5, 3) |

Draw the rectangle on the grid.

4 Two squares are drawn on a grid.

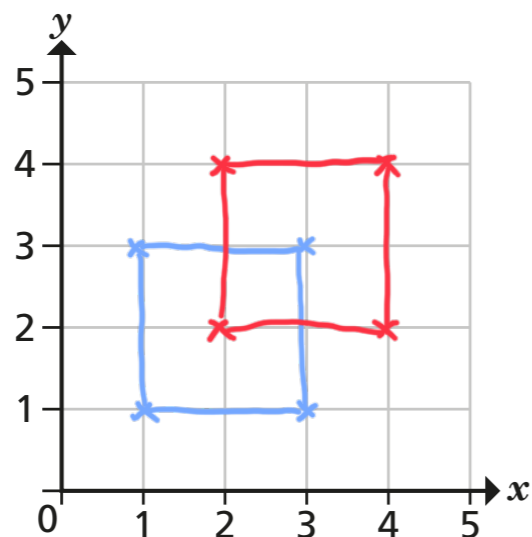Here are the coordinates of the vertices of each square.

Square A   (1, 1)   (1, 3)   (3, 3)   (3, 1)

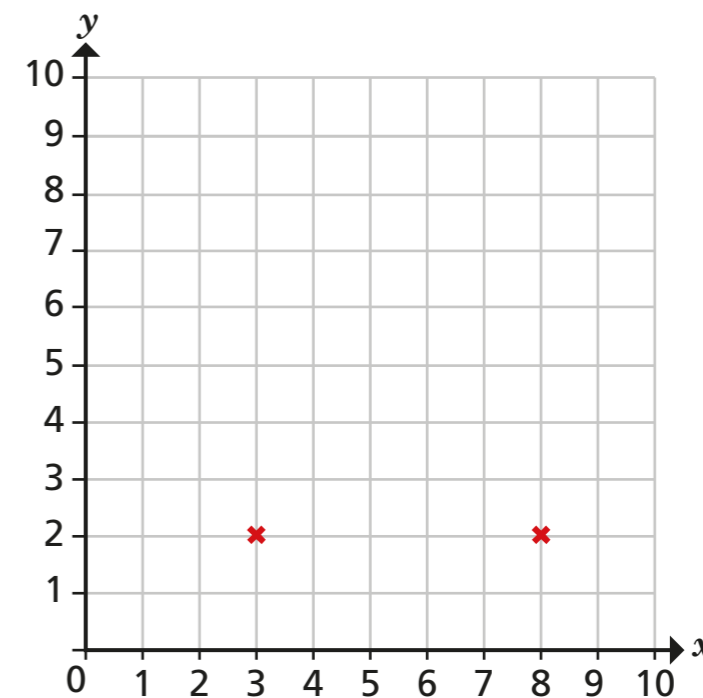Square B   (2, 2)   (2, 4)   (4, 4)   (4, 2)

a) Do you think the squares will overlap? _Yes_

b) Draw on the grid to check your answer.

5 Two vertices of a triangle are shown on the grid.

a) What are the coordinates of the two vertices shown?

(3 , 2) and (8 , 2)

b) Give a possible coordinate for the third vertex, if the triangle is right-angled.   e.g (3 , 10)

c) Give a possible coordinate for the third vertex, if the triangle is isosceles.   e.g (8 , 7)

Compare answers with a partner.

6 The coordinates of one vertex of a square are (10, 10).

Give possible coordinates for the other three vertices.

e.g. (0 , 0)   (0 , 10)   (10 , 0)

How many different answers can you find?