

Draw on a grid

I The cards show the coordinates of six points.

A (4, 4)

B (2, 3)

C (6, 4)

D (10, 8)

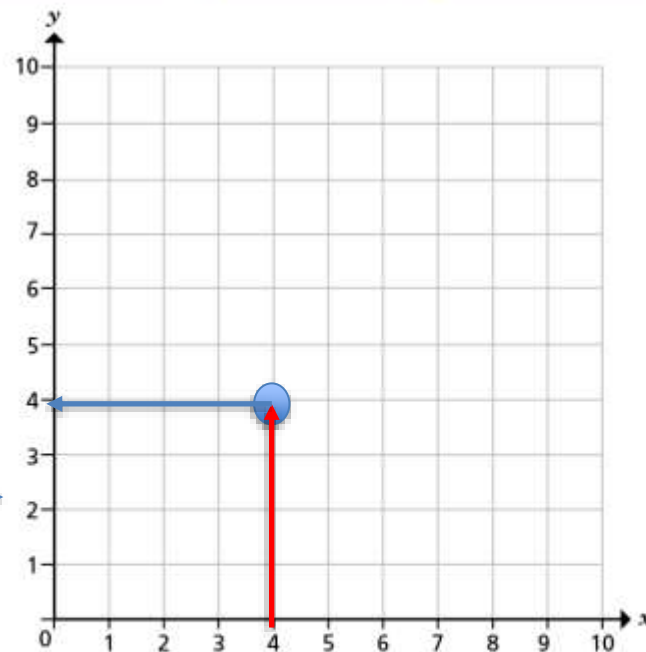
E (0, 5)

F (9, 0)

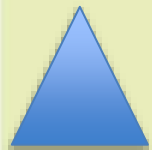
Plot and label the points
on the grid.

Remember when plotting coordinates on a grid you must look at the first digit in the brackets- this will tell you where to plot on the X axis. Then the second digit will tell you where to plot on the Y axis.

Lets do the first one A(4, 4)
So let's go along the X axis first which is 4. Trace your finger up the line and stop when you reach 4 on the Y- axis.

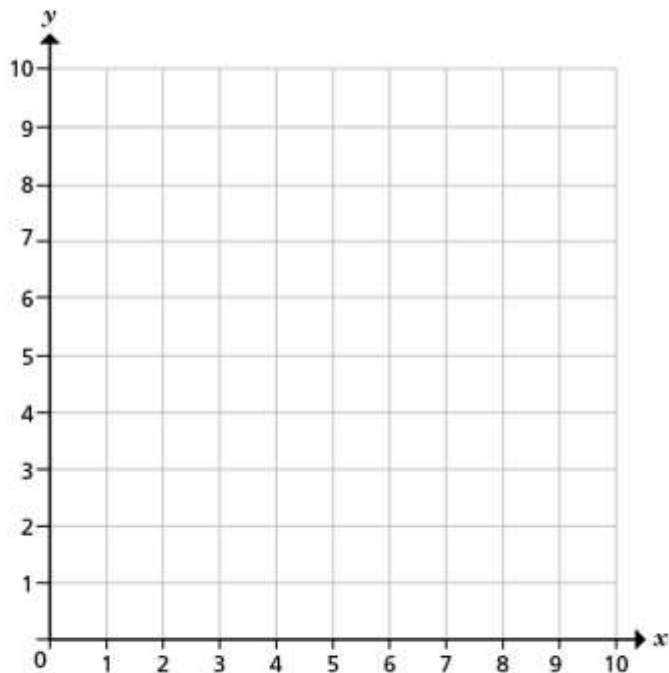


Compare answers with a partner.



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.

(,) and (,)

Compare answers with a partner.

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

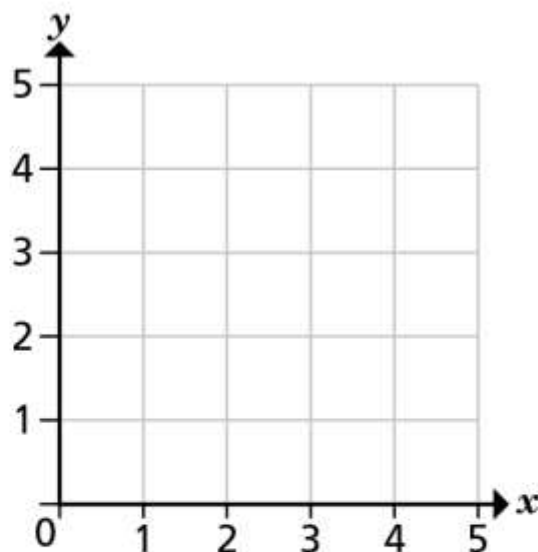
(1, 1)

(5, 1)

(1, 3)

(5, 3)

Draw the rectangle on the grid.



Vertex- is a corner where edges meet. The plural is vertices.



4

Two squares are drawn on a grid.

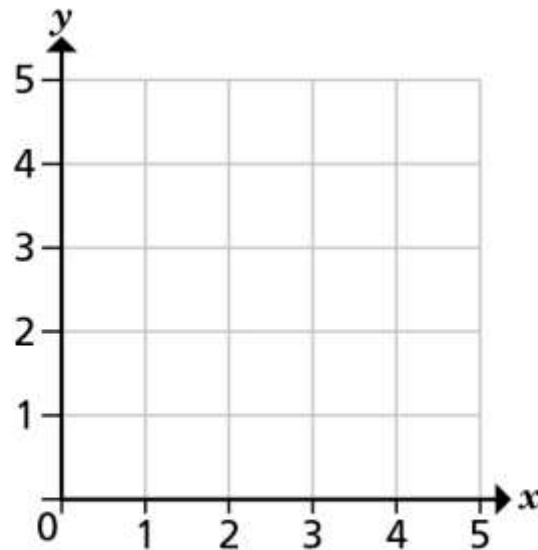
Here are the coordinates of the vertices of each square.

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? _____

b) Draw on the grid to check your answer.

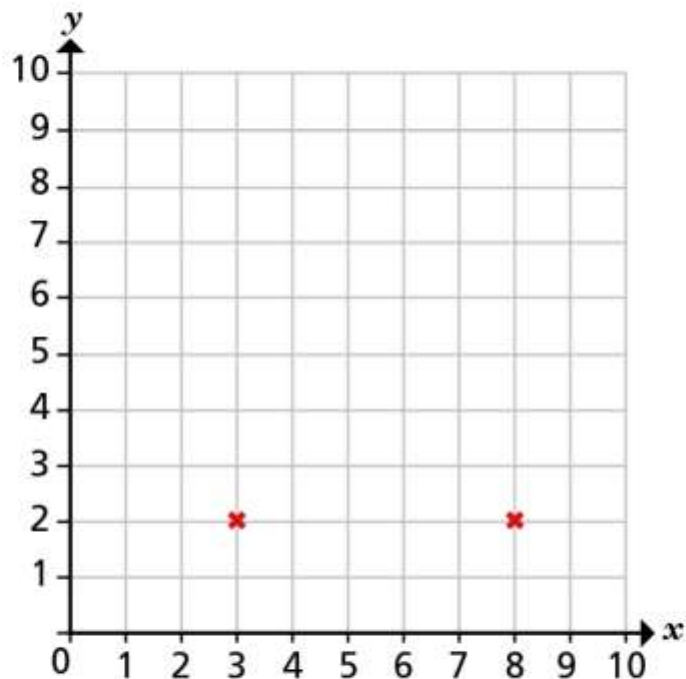


To answer a) you need to have a good look at the coordinates. Try to trace with your finger before drawing the lines out.





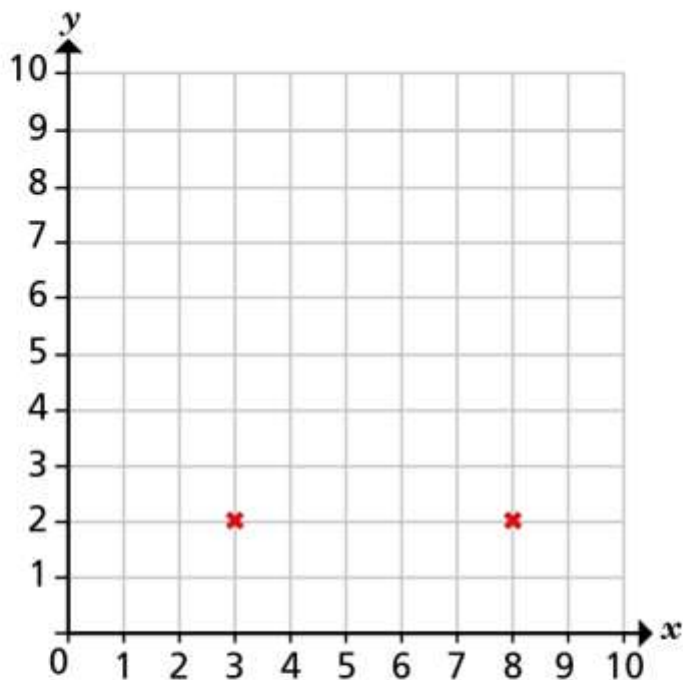
- 5 Two vertices of a triangle are shown on the grid.



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

(,) and (,)

5



- b)** Give a possible coordinate for the third vertex, if the triangle is right-angled.
- c)** Give a possible coordinate for the third vertex, if the triangle is isosceles.

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.

(,) (,) (,)

How many different answers can you find?

