

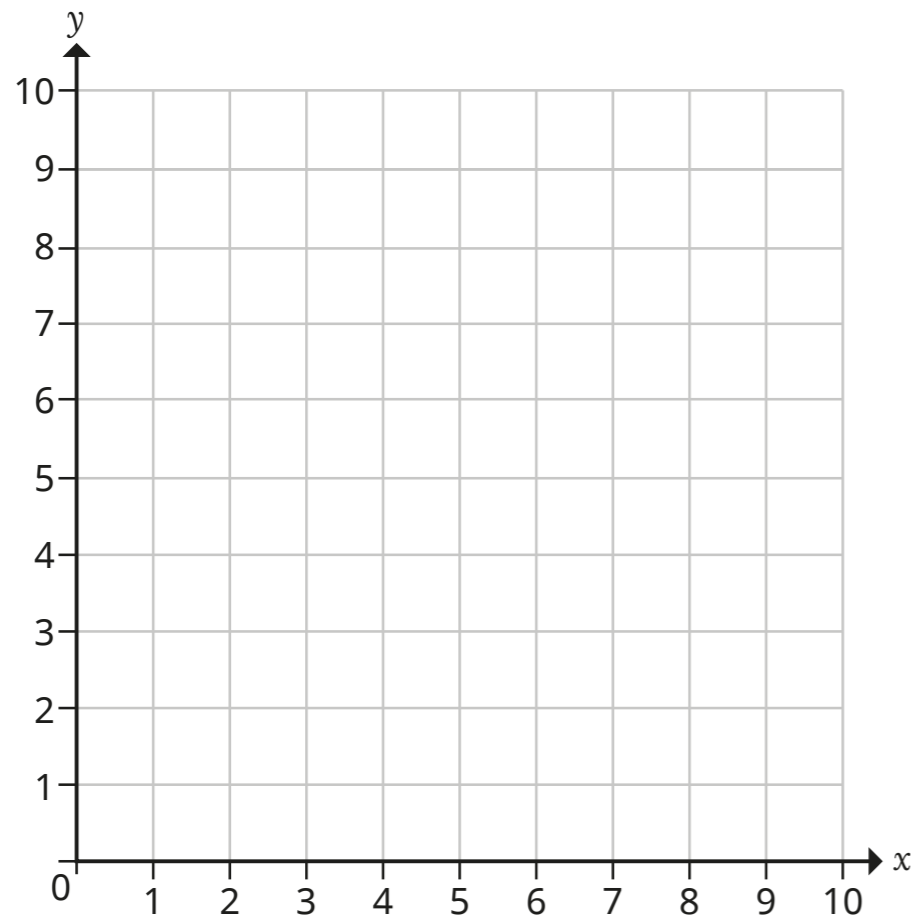
Draw 2-D shapes on a grid



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

- (3, 3)
- (7, 3)
- (3, 5)
- (7, 5)

Draw the rectangle on the grid.

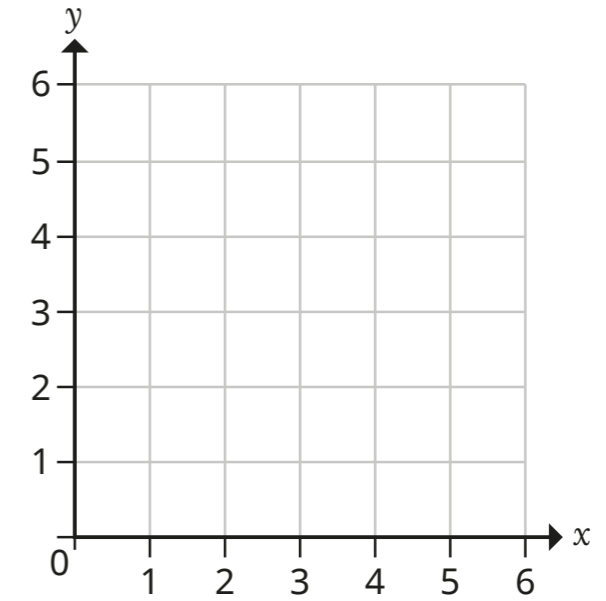


What do you notice about the x -values of the coordinates?
What do you notice about the y -values of the coordinates?

2 Here are the coordinates of the vertices of a polygon.

- (2, 1)
- (6, 1)
- (4, 6)

- a) What polygon do you think it is?
- b) Plot the points on the grid and join them with straight lines.

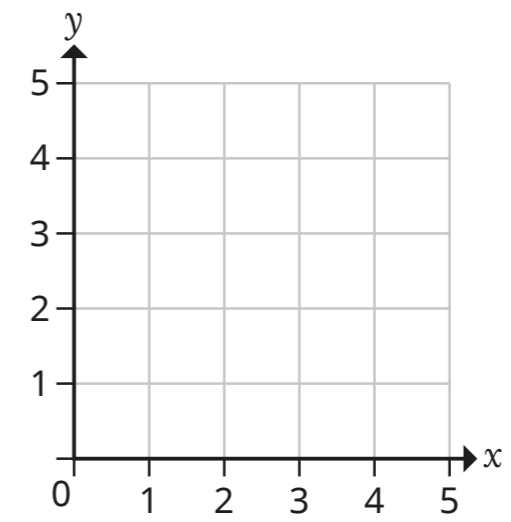


c) What shape have you drawn? _____

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

- (2, 1)
- (0, 3)
- (4, 3)
- (2, 5)

a) Plot the points on the grid and join them with straight lines.



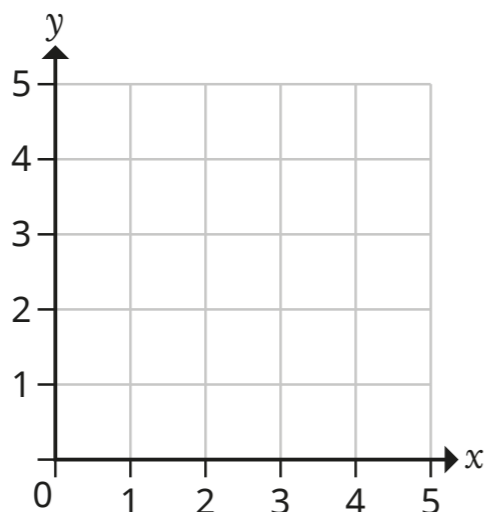
b) What shape have you drawn? _____



- 4 Here are the coordinates of two vertices of a square.

(3, 1) (3, 3)

- a) Plot the points on the grid.



- b) What could the coordinates of the other two vertices be?

(,) and (,)

Compare answers with a partner.

How many different possible answers can you find?

- 5 Two squares are drawn on a grid.

Here are the coordinates of the vertices of each square.

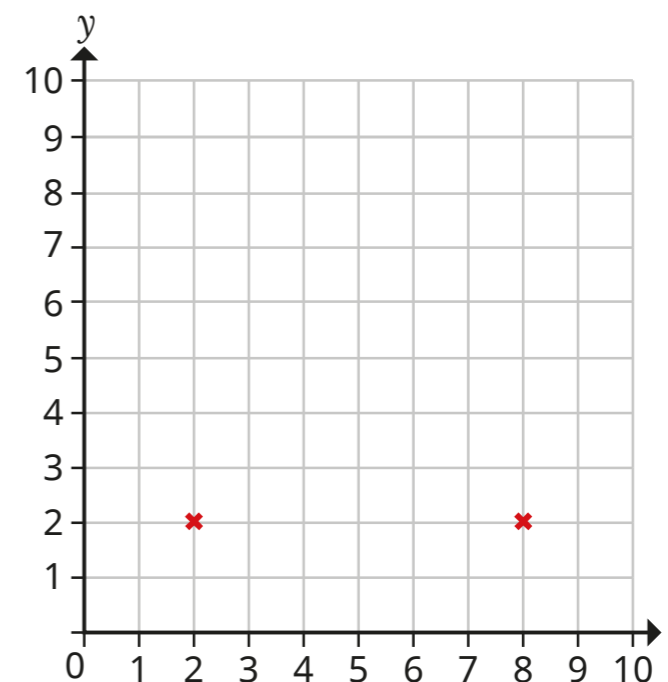
Square A (1, 1) (1, 3) (3, 3) (3, 1)

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

- a) Do you think that the squares will overlap? _____

- b) Draw on a grid to check your answer.

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



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

(,) and (,)

- 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.

- 7 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?