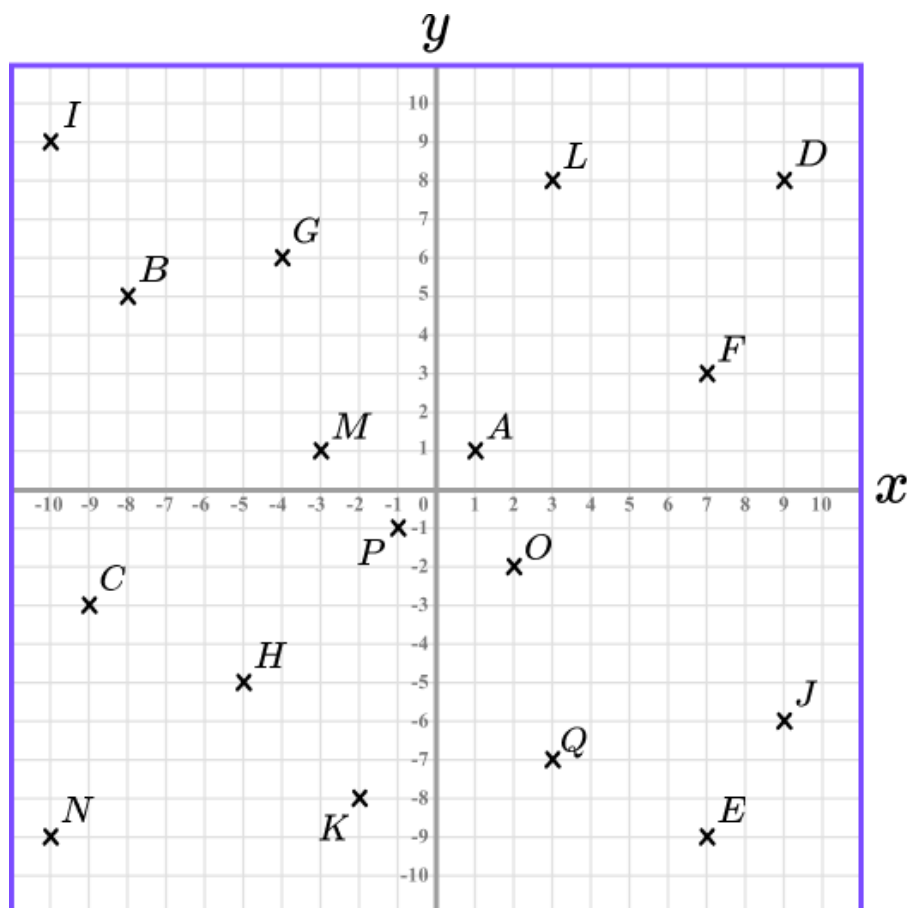


Coordinates - Worksheet

Skill

Group A - Reading coordinates

Using the coordinate axes below, identify the coordinates labelled:



1) Identify the coordinate of point *A*.

2) Identify the coordinate of point *B*.

3) Identify the coordinate of point *C*.

4) Identify the coordinate of point *D*.

5) Identify the coordinate of point *E*.

6) Identify the coordinate of point *F*.

7) Identify the coordinate of point *G*.

8) Identify the coordinate of point *H*.

9) Identify the coordinate of point *I*.

10) Identify the coordinate of point *J*.

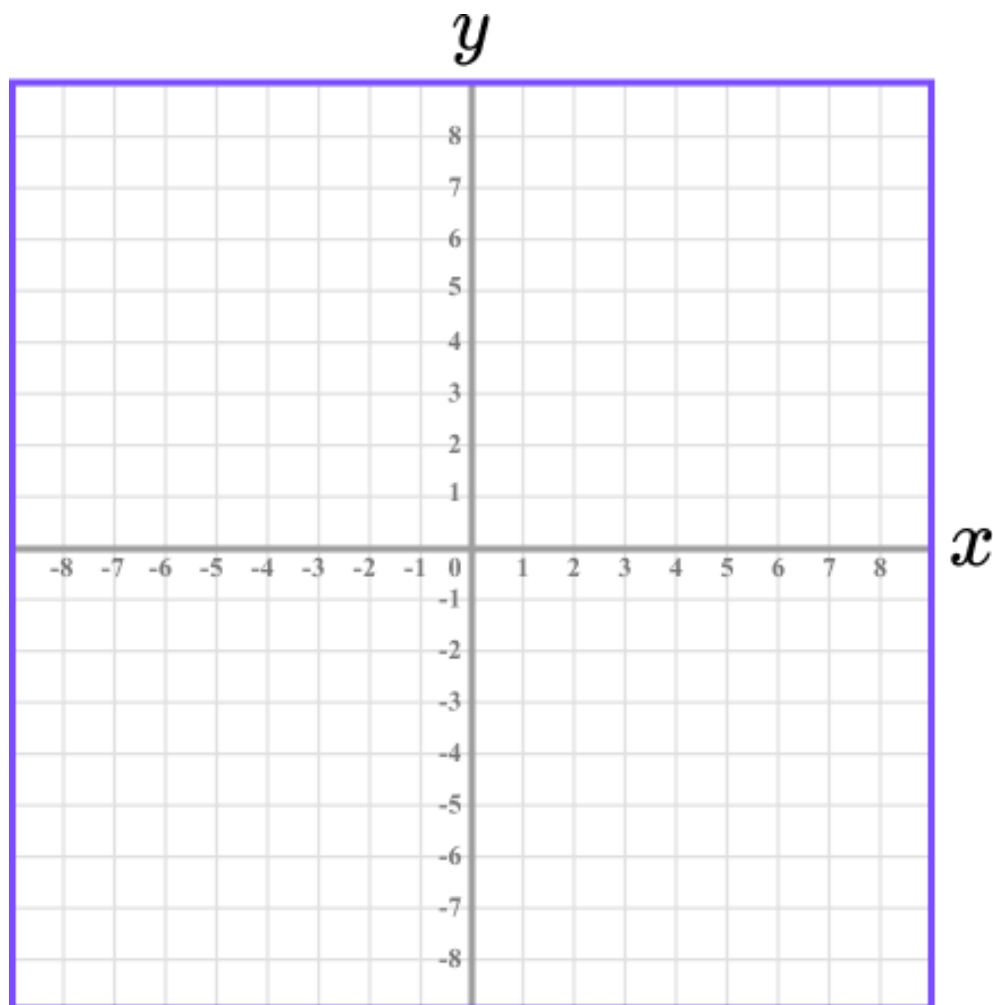
11) Identify the coordinate of point *K*.

12) Identify the coordinate of point *L*.

Coordinates - Worksheet

Group B - Plotting coordinates

Plot and label the following coordinates on the grid provided:



1) $A(4, 6)$

2) $B(1, 1)$

3) $C(6, 4)$

4) $D(4, 0)$

5) $E(0, 4)$

6) $F(-4, 6)$

7) $G(6, -4)$

8) $H(-4, -6)$

9) $I(0, -4)$

10) $J(-4, 0)$

11) $K(4, -6)$

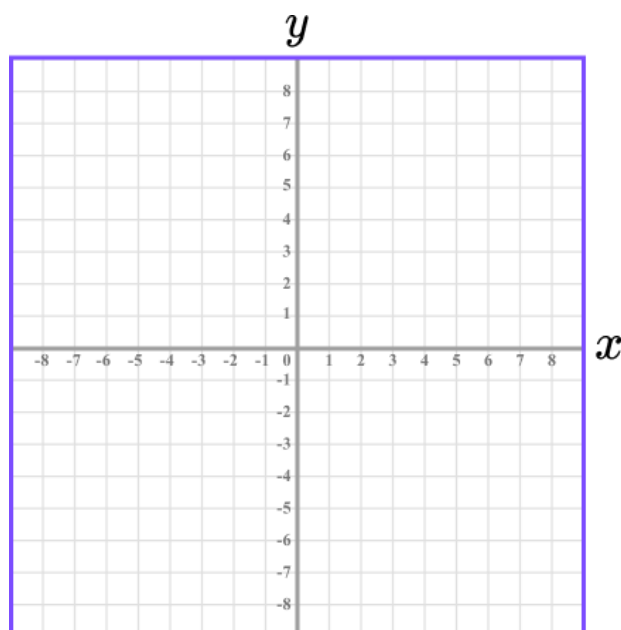
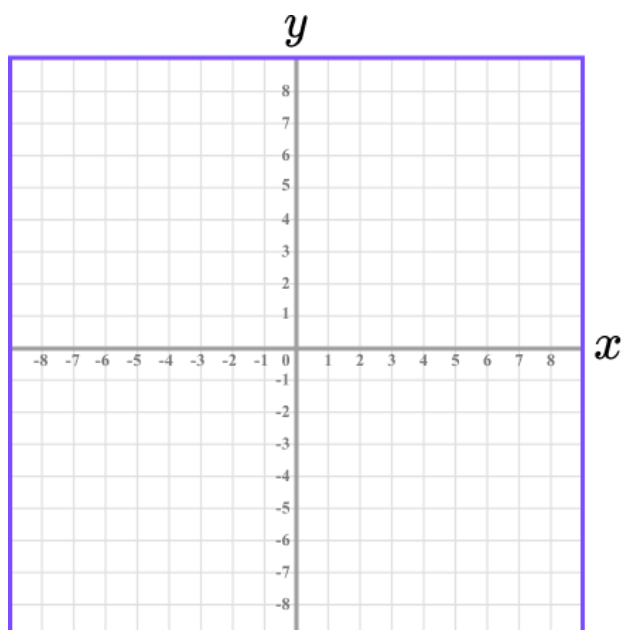
12) $L(0, -6)$

Coordinates - Worksheet

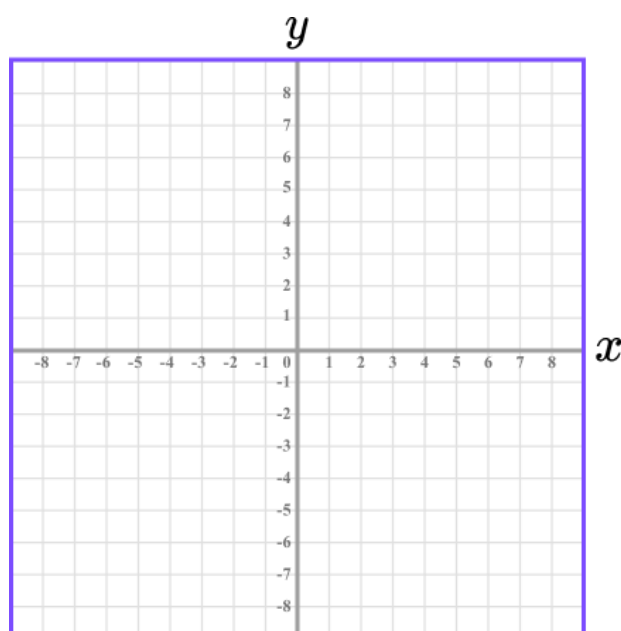
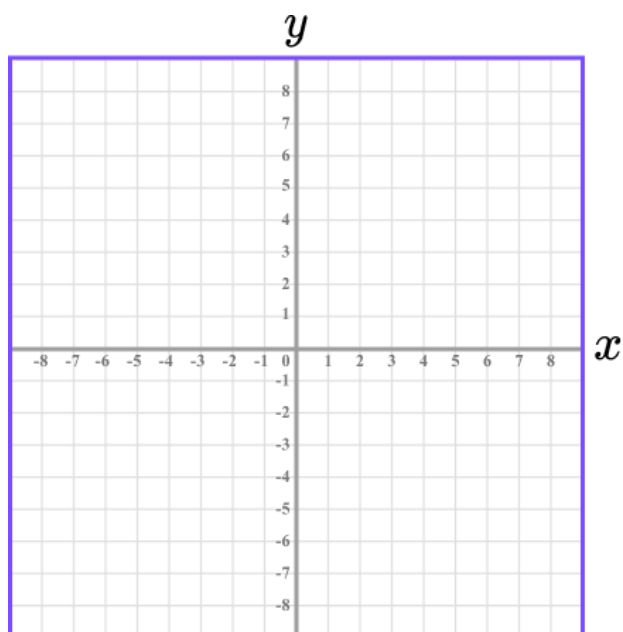
Group C - Coordinates as vertices of shapes

Identify the coordinate to complete the shapes below:

- 1)** $(1, 3)$ $(5, 3)$ and $(5, 7)$ are three vertices of a rectangle. Plot these points and identify the coordinate of the last vertices.
- 2)** $(3, 4)$ $(4, 1)$ and $(1, 0)$ are three vertices of a square. Plot these points and identify the coordinate of the last vertices.

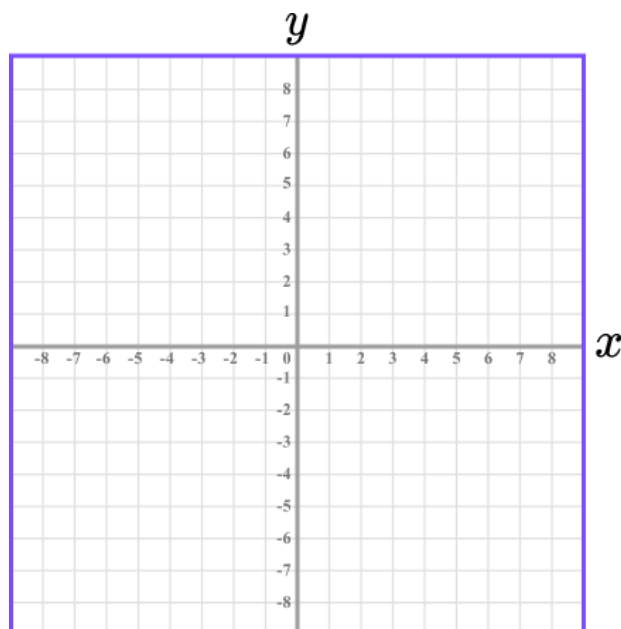
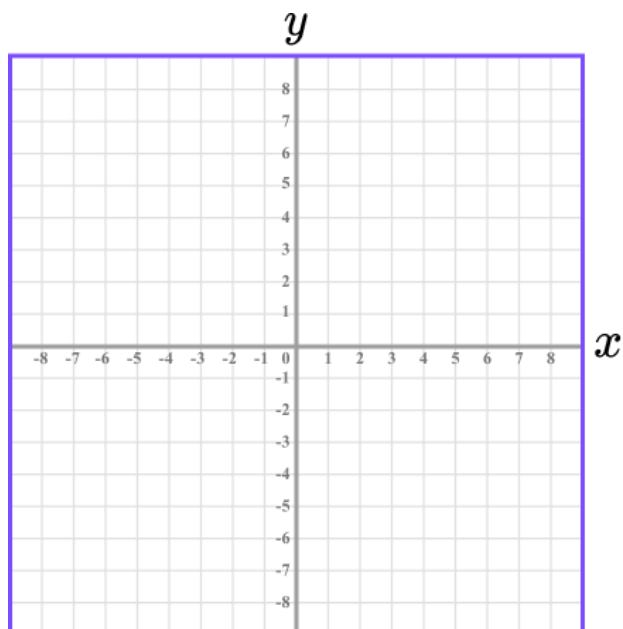


- 3)** $(-1, 3)$ $(5, 3)$ and $(5, 7)$ are three vertices of a rectangle. Plot these points and identify the coordinate of the last vertices.
- 4)** $(-3, 4)$ $(-2, 1)$ and $(-5, 0)$ are three vertices of a square. Plot these points and identify a possible coordinate of the last vertices.

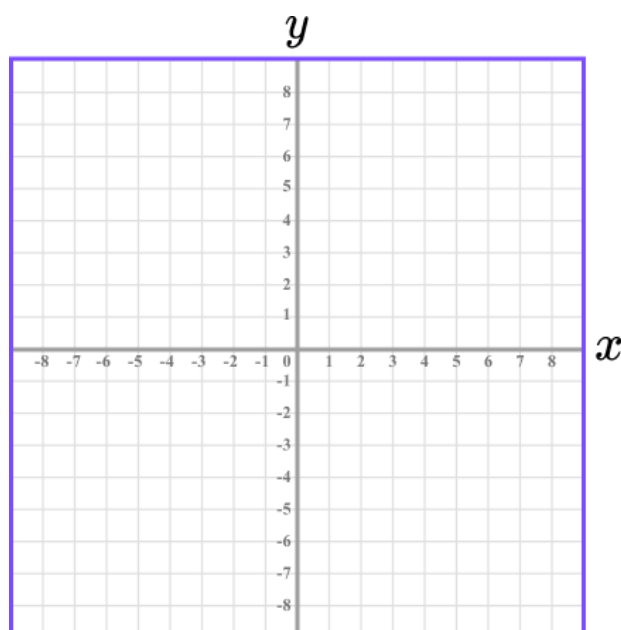
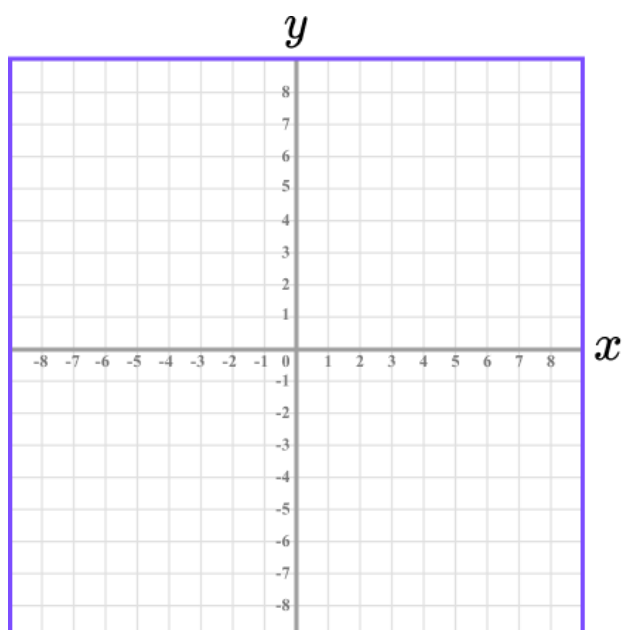


Coordinates - Worksheet

- 5)** $(-3, 3)$ $(0, 6)$ and $(3, 3)$ are three vertices of a kite. Plot these points and identify a possible coordinate of the last vertices.
- 6)** $(-4, 1)$ $(4, 1)$ and $(6, 5)$ are three vertices of a parallelogram. Plot these points and identify the coordinate of the last vertices.

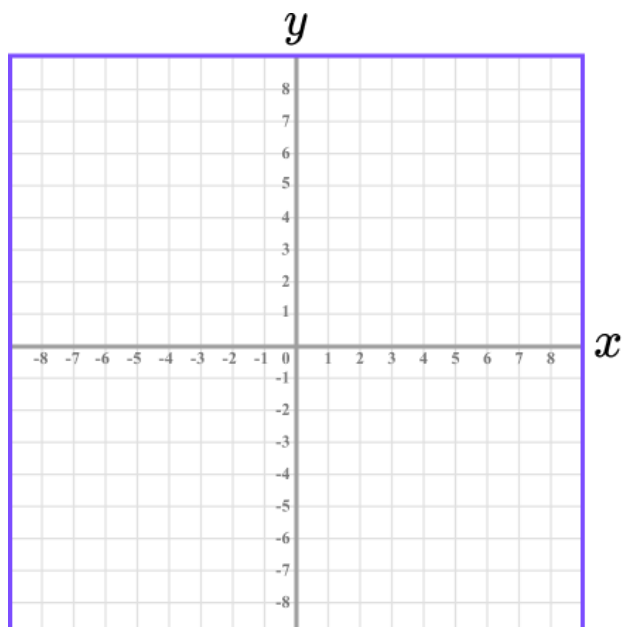


- 7)** $(-3, -2)$ $(-5, -5)$ and $(-3, -8)$ are three vertices of a kite. Plot these points and identify a possible coordinate of the last vertices.
- 8)** $(-4, 1)$ and $(4, 1)$ are two vertices of an isosceles triangle. Plot these points and identify a possible coordinate of the last vertices.

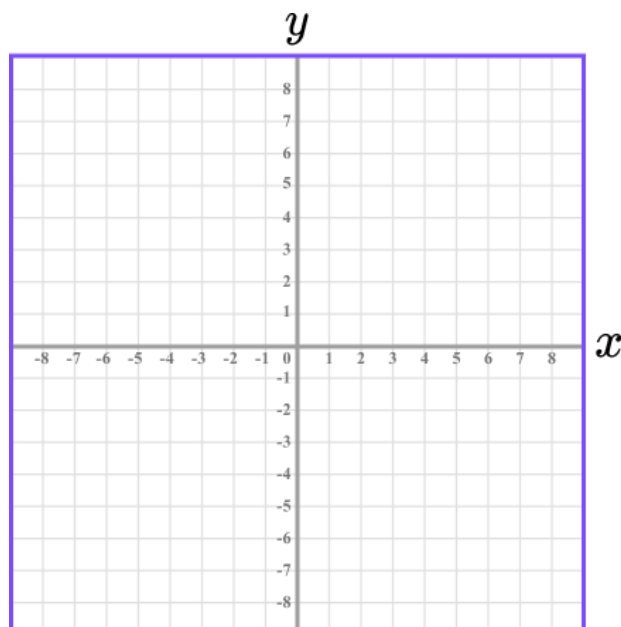


Coordinates - Worksheet

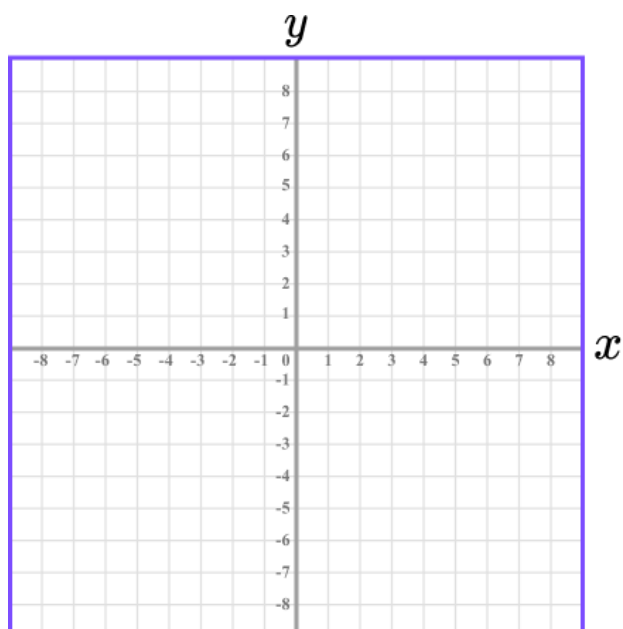
9) $(-3, 1)$ $(0, 5)$ and $(3, 1)$ are three vertices of a rhombus. Plot these points and identify the coordinate of the last vertices.



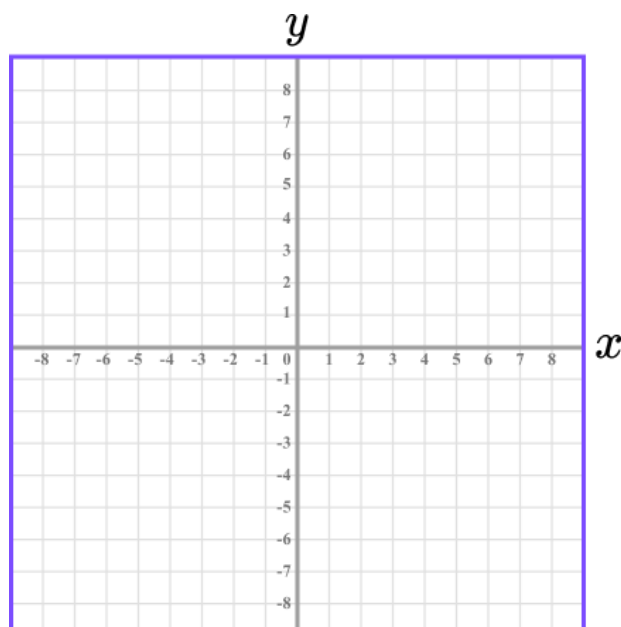
10) $(-7, -5)$ $(-7, 3)$ and $(3, 3)$ are three vertices of a rectangle. Plot these points and identify the coordinate of the last vertices.



11) $(1, 2)$ $(4, 4)$ and $(7, 2)$ are three vertices of a kite. Plot these points and identify a possible coordinate of the last vertices.



12) $(-5, -1)$ $(-2, -6)$ and $(6, -6)$ are three vertices of a parallelogram. Plot these points and identify the coordinate of the last vertices.



Applied

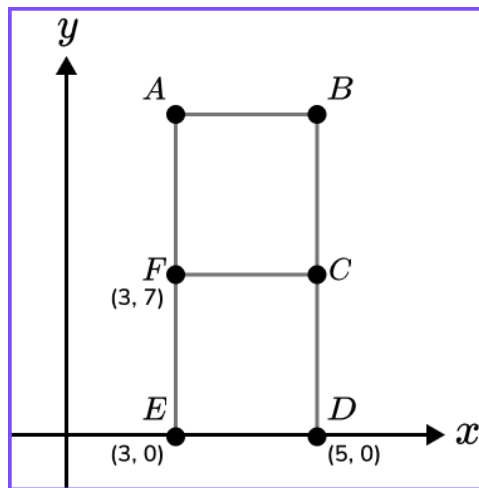
- 1) (a) Plot the following coordinates on a set of axes with x from -6 to 6, and y from -6 to 6:

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

$(-3, -2)$ $(-3, 0)$ $(-1, 2)$

- (b) Join the points to make a polygon.
(c) Name the polygon you have drawn.

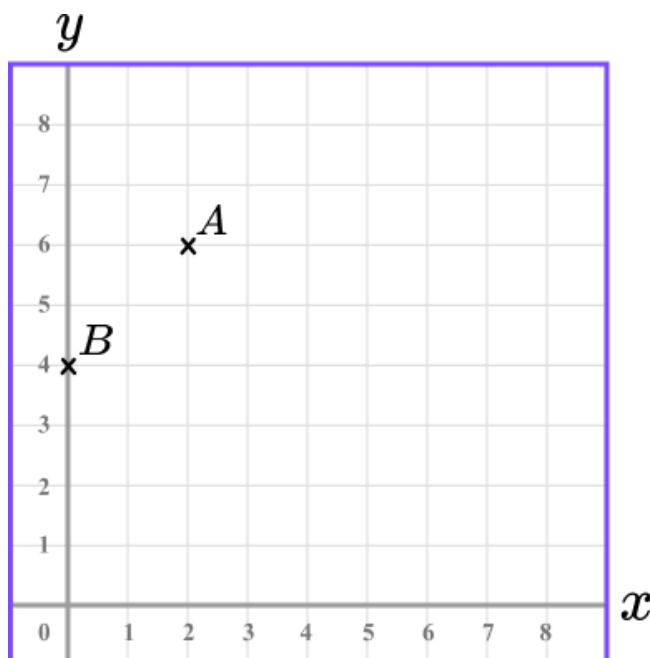
- 2) The diagram shows two congruent rectangles.



- (a) Find the coordinates of point A.
(b) Find the coordinates of point B.
(c) Calculate the total area of the two rectangles.
- 3) Two opposite vertices of a square lie at the points $(-6, -4)$ and $(2, 4)$. Find the coordinates of the two other vertices.
- 4) Points A, B and C all lie on a straight line. Their respective coordinates are $(3, 4)$, $(7, 14)$ and $(11, c)$. Work out the value of c .
- 5) Points A, B and C are collinear. They all lie on a straight line. Their respective coordinates are $(-3, 7)$, $(b, 3)$ and $(2, -1)$. Work out the value of b .

Coordinates - Exam Questions

- 1) Below is a set of coordinate axes:



- (a) Write down the coordinates of the point *A*.

.....
(1)

- (b) Write down the coordinates of the point *B*.

.....
(1)

- (c) On the grid, mark the point (5 , 3). Label it with the letter *C*.

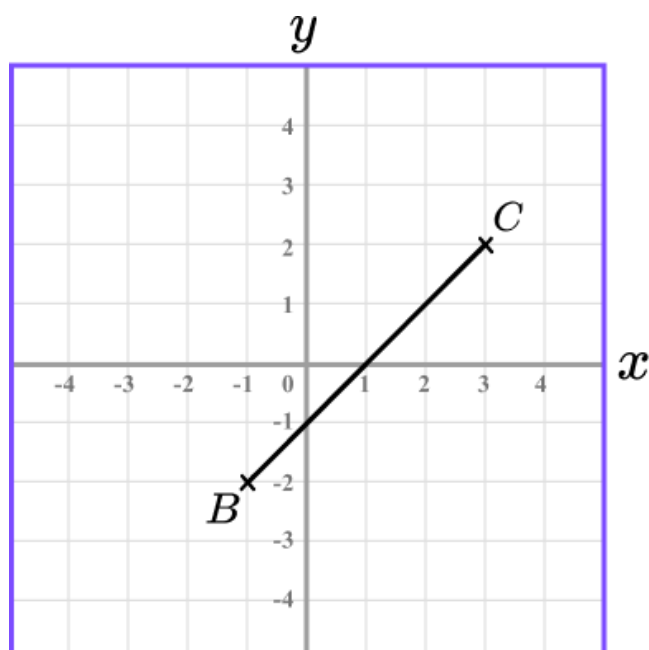
(1)

- (d) On the grid, mark the point (2 , 0). Label it with the letter *D*.

(1)
(4 marks)

Coordinates - Exam Questions

- 2) Below is a set of coordinate axes:



- (a) Plot the point with coordinates (2, 4). Label this point A.

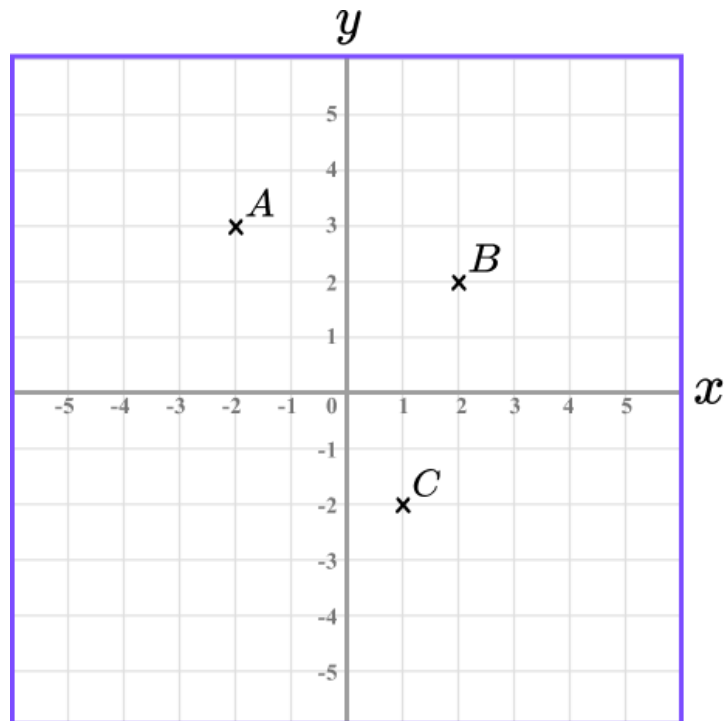
(1)

- (b) Write down the coordinates of the midpoint of BC.

.....
(1)
(2 marks)

Coordinates - Exam Questions

- 3) Below is a set of coordinate axes:



- (a) Write down the coordinates of point B .

.....
(1)

- (b) Find the coordinates of the midpoint of AB .

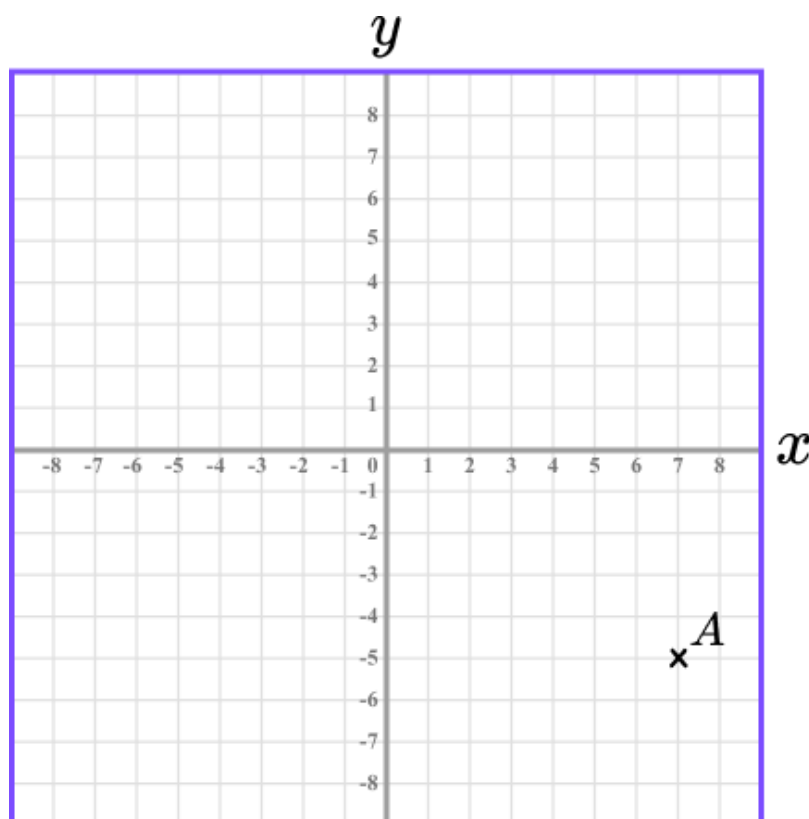
.....
(1)

- (b) $ABCD$ is a square. On the grid mark with a cross (X) the point D so that $ABCD$ is a square.

(1)
(3 marks)

Coordinates - Exam Questions

- 4) Below is a set of coordinate axes:



- (a) Write down the coordinates of point A.

.....
(1)

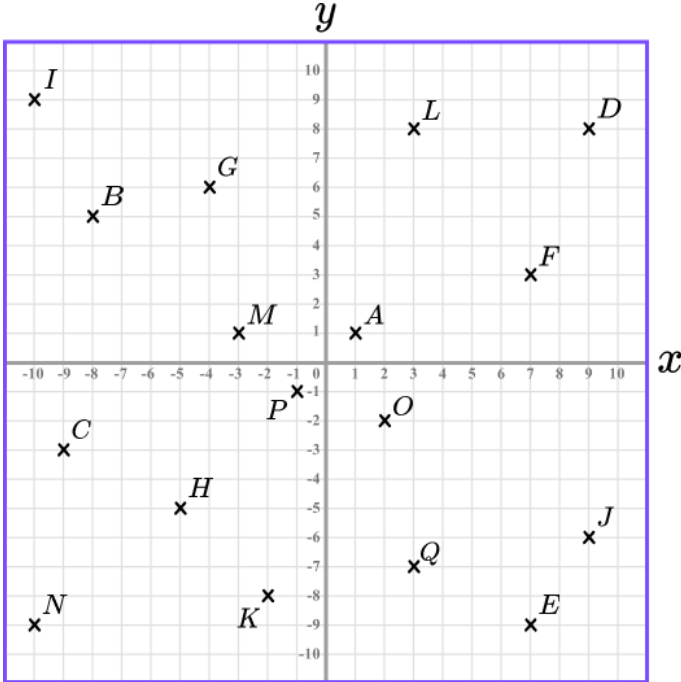
- (b) On the grid mark with a cross (X) the point (3, 5). Label this point B.

(1)

- (c) On the grid, draw the line with the equation $x = 3$

(1)
(3 marks)

Coordinates - Answers

	Question	Answer
	Skill Questions	
Group A	Using the coordinate axes below, identify the coordinates labelled: 	
	- Identify the coordinate of point A. - Identify the coordinate of point B. - Identify the coordinate of point C. - Identify the coordinate of point D. - Identify the coordinate of point E. - Identify the coordinate of point F. - Identify the coordinate of point G. - Identify the coordinate of point H. - Identify the coordinate of point I. - Identify the coordinate of point J. - Identify the coordinate of point K. - Identify the coordinate of point L.	(1, 1) (- 8, 5) (- 9, - 3) (9, 8) (7, - 9) (7, 3) (- 4, 6) (- 5, - 5) (- 10, 9) (9, - 6) (- 2, - 8) (3, 8)

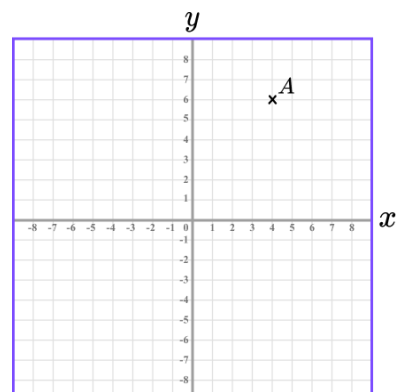
Coordinates - Answers

Group B

Plot and label the following coordinates on the grid provided:

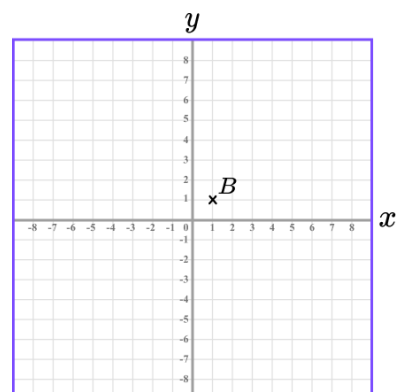
1) $A(4, 6)$

1)



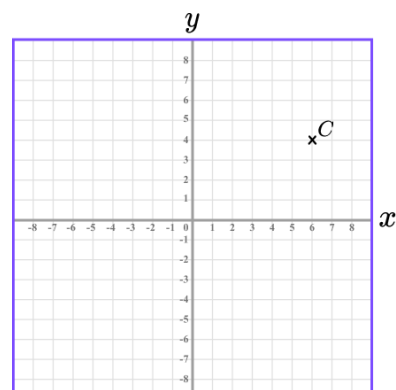
2) $B(1, 1)$

2)



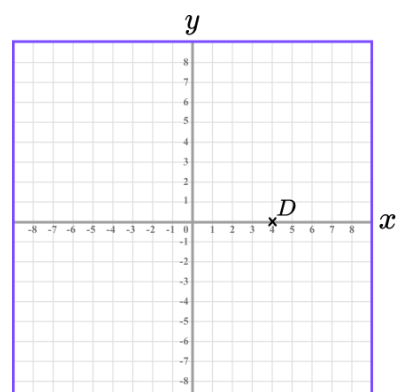
3) $C(6, 4)$

3)

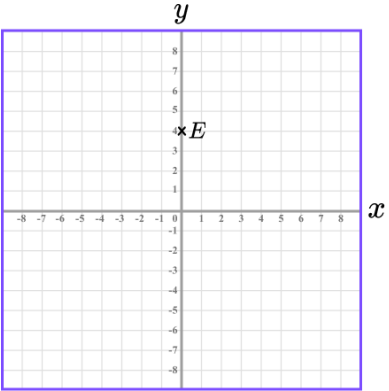
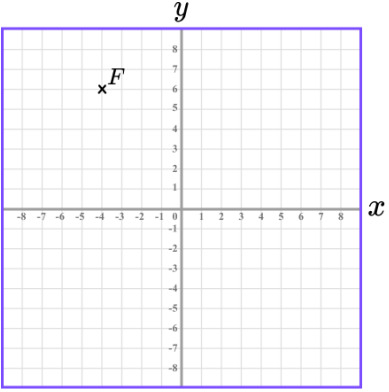
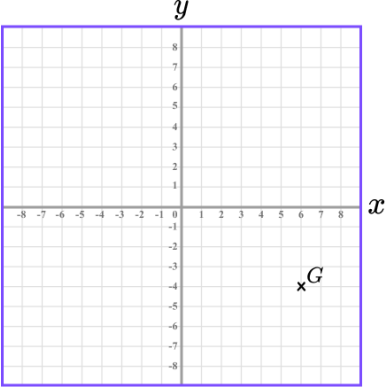
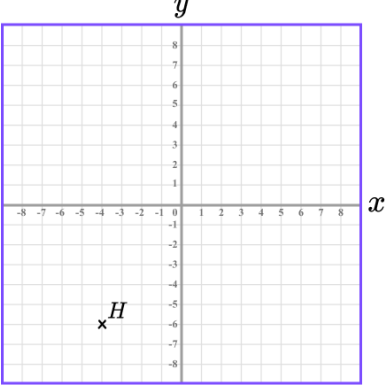


4) $D(4, 0)$

4)



Coordinates - Answers

Group B contd	5) $E(0, 4)$ 6) $F(-4, 6)$ 7) $G(6, -4)$ 8) $H(-4, -6)$	5)  6)  7)  8) 
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Coordinates - Answers

Group B
contd

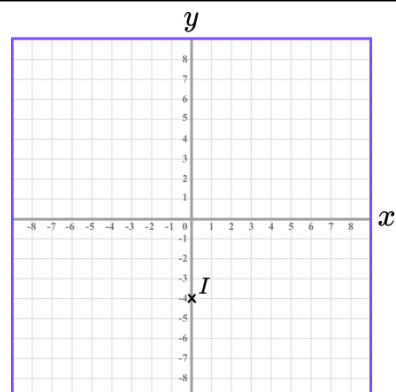
9) $I(0, -4)$

10) $J(-4, 0)$

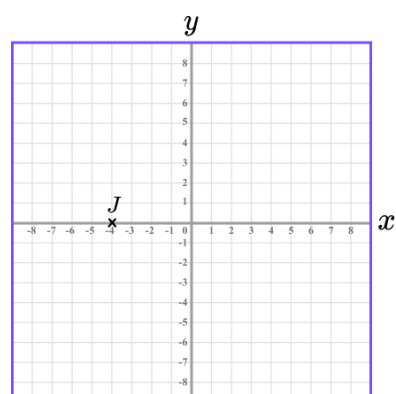
11) $K(4, -6)$

12) $L(0, -6)$

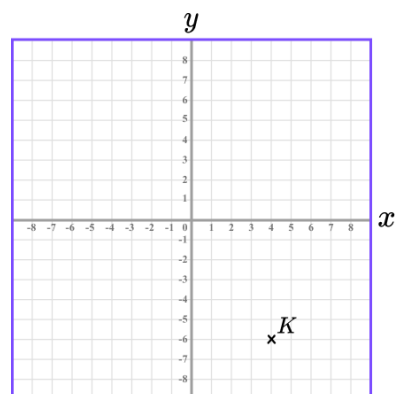
9)



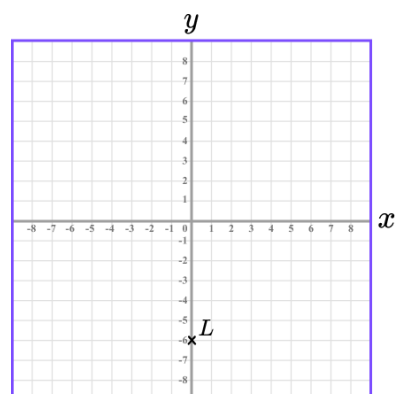
10)



11)



12)



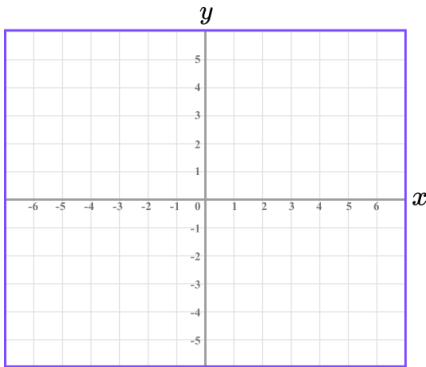
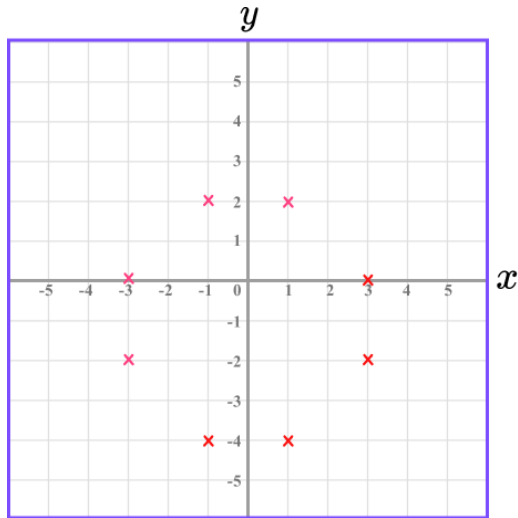
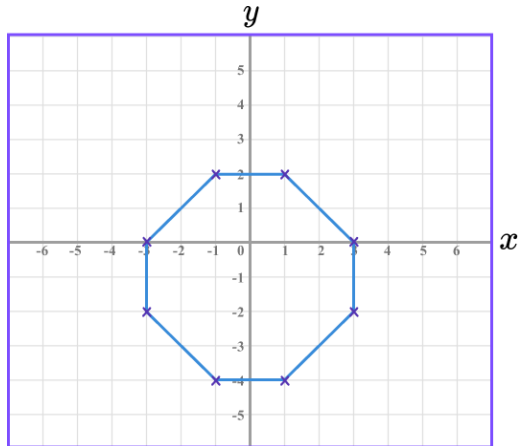
Coordinates - Answers

Group C	Identify the coordinate to complete the shapes below: 1) (1, 3) (5, 3) and (5, 7) are three vertices of a rectangle. Plot these points and identify the coordinate of the last vertices. 2) (3, 4) (4, 1) and (1, 0) are three vertices of a square. Plot these points and identify the coordinate of the last vertices. 3) (− 1, 3) (5, 3) and (5, 7) are three vertices of a rectangle. Plot these points and identify the coordinate of the last vertices. 4) (− 3, 4) (− 2, 1) and (− 5, 0) are three vertices of a square. Plot these points and identify a possible coordinate of the last vertices. 5) (− 3, 3) (0, 6) and (3, 3) are three vertices of a kite. Plot these points and identify a possible coordinate of the last vertices. 6) (− 4, 1) (4, 1) and (6, 5) are three vertices of a parallelogram. Plot these points and identify the coordinate of the last vertices. 7) (− 3, − 2) (− 5, − 5) and (− 3, − 8) are three vertices of a kite. Plot these points and identify a possible coordinate of the last vertices. 8) (− 4, 1) and (4, 1) are two vertices of an isosceles triangle. Plot these points and identify a possible coordinate of the last vertices.	1) (1, 7) 2) (0, 3) 3) (− 1, 7) 4) (− 6, 3) 5) Possible answers include: (0, 2), (0, 1), (0, 0), (0, − 1) and so on 6) (− 2, 5) 7) Possible answers include: (0, − 5), (1, − 5), (2, − 5), and so on 8) Possible answers include: (0, 2), (0, 3), (0, 4), (0, 5) and so on, or (0, 0), (0, − 1), (0, − 2) and so on
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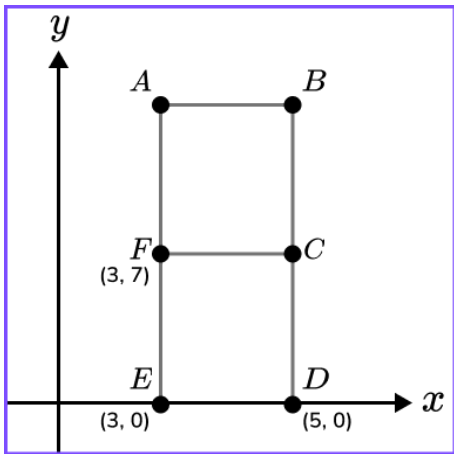
Coordinates - Answers

Group C contd	9) $(-3, 1)$ $(0, 5)$ and $(3, 1)$ are three vertices of a rhombus. Plot these points and identify the coordinate of the last vertices. 10) $(-7, -5)$ $(-7, 3)$ and $(3, 3)$ are three vertices of a rectangle. Plot these points and identify the coordinate of the last vertices. 11) $(1, 2)$ $(4, 4)$ and $(7, 2)$ are three vertices of a kite. Plot these points and identify a possible coordinate of the last vertices. 12) $(-5, -1)$ $(-2, -6)$ and $(6, -6)$ are three vertices of a parallelogram. Plot these points and identify the coordinate of the last vertices.	9) $(0, -3)$ 10) $(3, -5)$ 11) Possible answers include: $(4, -1)$, $(4, -2)$, $(4, -3)$, $(4, -4)$ and so on 12) $(3, -1)$
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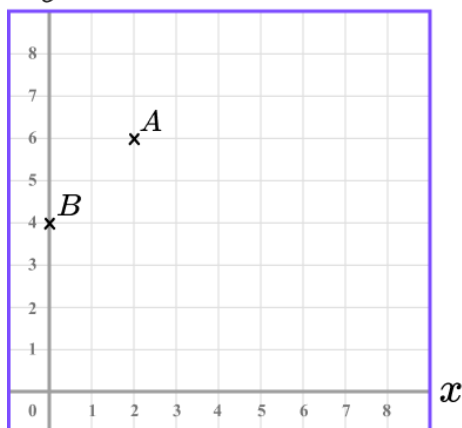
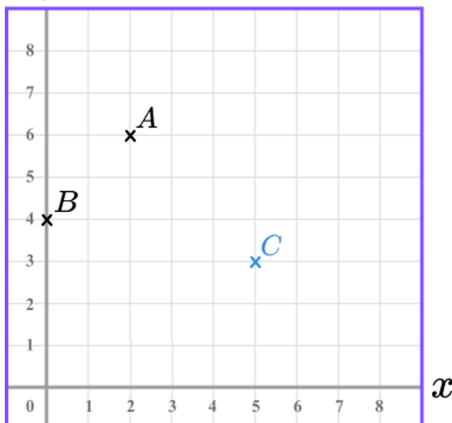
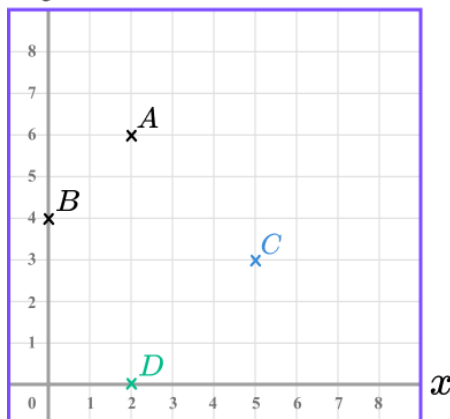
Coordinates - Answers

	Question	Answer
	Applied Questions	
1)	a) Plot the following coordinates $(1, 2)$ $(3, 0)$ $(3, -2)$ $(1, -4)$ $(-1, -4)$ $(-3, -2)$ $(-3, 0)$ $(-1, 2)$  b) Join the points to make a polygon. c) Name the polygon you have drawn.	a)  b)  c) Octagon

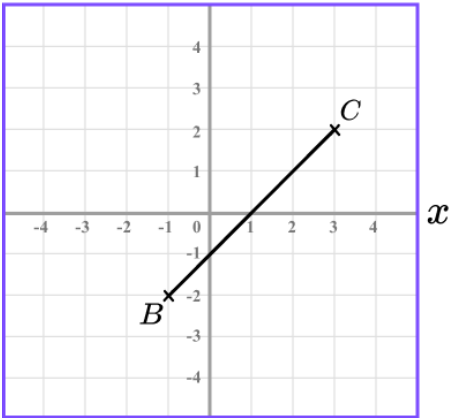
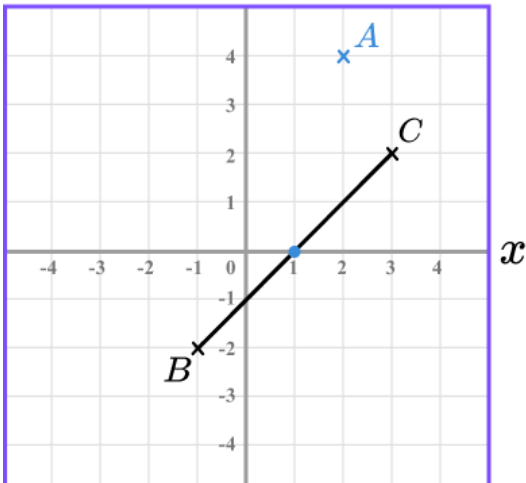
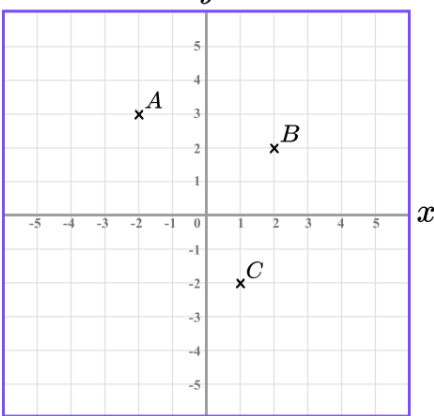
Coordinates - Answers

2)	The diagram shows two congruent rectangles.  a) Find the coordinates of point A. b) Find the coordinates of point B. c) Calculate the total area of the two rectangles.	a) (3 , 14) b) (5 , 14) c) 28
3)	Two opposite vertices of a square lie at the points (− 6 , − 4) and (2 , 4). Find the coordinates of the two other vertices.	(−6 , 4) and (2 , − 4)
4)	Points A, B and C all lie on a straight line. Their respective coordinates are (3 , 4), (7 , 14) and (11, c). Work out the value of c.	24
5)	Points A, B and C are collinear. They all lie on a straight line. Their respective coordinates are (− 3 , 7), (b , 3) and (2 , − 1). Work out the value of b.	− 0.5

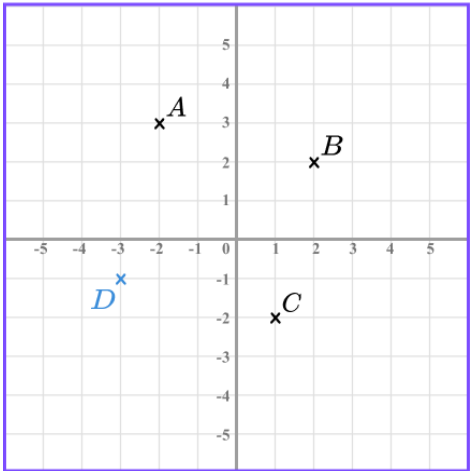
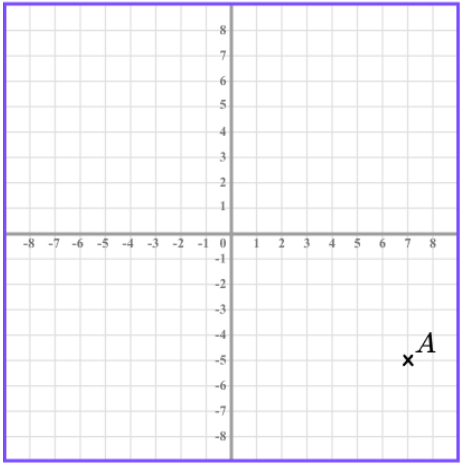
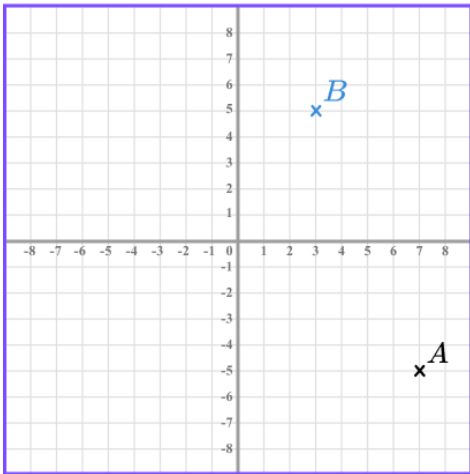
Coordinates - Mark Scheme

	Question	Answer
	Exam Questions	
1)	Below is a set of coordinate axes: 	
(a)	Write down the coordinates of the point A .	(a) (2 , 6) (1)
(b)	Write down the coordinates of the point B .	(b) (0 , 4) (1)
(c)	On the grid, mark the point (5 , 3). Label it with the letter C	(c)  (1)
(d)	On the grid, mark the point (2 , 0). Label it with the letter D .	 (1)

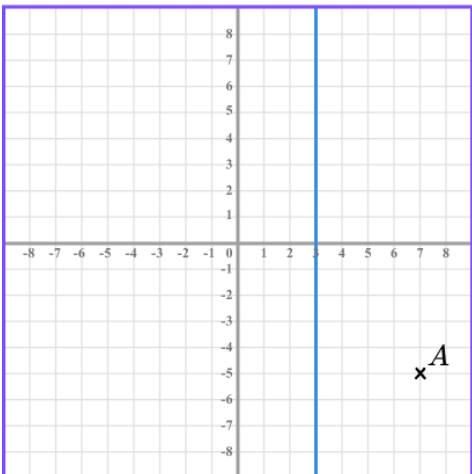
Coordinates - Mark Scheme

2)	Below is a set of coordinate axes:  (a) Plot the point with coordinates (2, 4). Label this point A.	(a)  (1)
(b)	Write down the coordinates of the midpoint of BC.	(b) (1 , 0) (1)
3)	Below is a set of coordinate axes:  (a) Write down the coordinates of point B.	(a) (2 , 2) (1)
(b)	Find the coordinates of the midpoint of AB.	(b) (0 , 2.5) (1)

Coordinates - Mark Scheme

	(c) $ABCD$ is a square. On the grid mark with a cross (X) the point D so that $ABCD$ is a square.	(c) 	(1)
4)	Below is a set of coordinate axes: 		
	(a) Write down the coordinates of point A.	(a) $(7, -5)$	(1)
	(b) On the grid mark with across (X) the point $(3, 5)$. Label this point B.	(b) 	(1)

Coordinates - Mark Scheme

(c)	On the grid, draw the line with the equation $x = 3$	(c)  (1)	
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