

Kingsmoor Lockdown English work: Week 1

Day 1 Wednesday 6 <sup>th</sup> January	
Reading	Read Flood Alert! on page 2 and 3 of your book. Answer the Reading Comprehension questions in your Bug Club workbook for day 1 and 2
Spelling	Practise the following vocab from the text: absorption overflow coastal devastating evacuate repairing estimated
Handwriting	Copy page 2 in your neatest handwriting. Watch out for those lower case f and p!
Writing	Imagine you are caught in the flood in Honister, Cumbria and have had to be evacuated. Write a diary entry or recount about your experience.

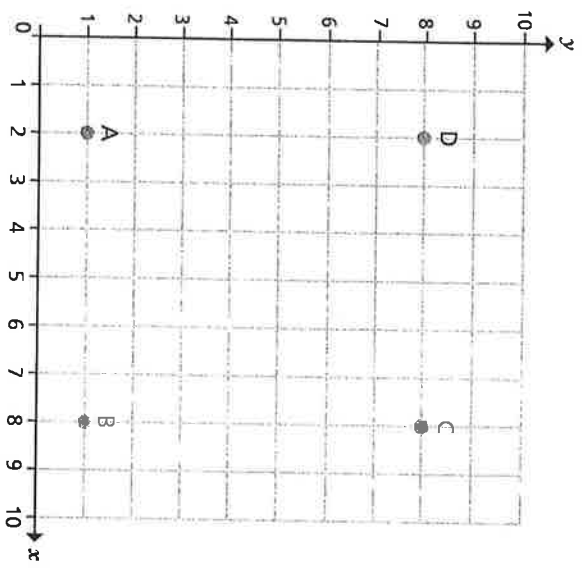
Day 2 Thursday 7 <sup>th</sup> January	
Reading	Surviving a Flood! On page 4 - 5 of your book. Answer the Reading Comprehension questions in your Bug Club workbook for day 2 and 4 on pages 4 and 5
Spelling	Practise the following vocab from the text: currents undrinkable dangerous helicopters battery-powered emergency
Writing	Put together a list of emergency items you might need in your survival kit. Use the text to help you. Remember to follow the rules of using bullet points in a list. <a href="https://www.bbc.co.uk/bitesize/topics/zvwwxnb/articles/z2yydxs">https://www.bbc.co.uk/bitesize/topics/zvwwxnb/articles/z2yydxs</a>

Day 3 Friday 8 <sup>th</sup> January	
Reading	Fixing the Damage on page 6 - 7 of your book. Answer the Reading Comprehension questions in your Bug Club workbook for day 5 on pages 5
Spelling	Practise your common exception words for this half term: <u>Silver spellings</u> embarrass environment equipped equipment especially exaggerate excellent existence explanation familiar foreign forty frequently government guarantee harass hindrance
Writing	The three texts we have looked at this week are all information texts. They have a title, sub headings and are all written in the present tense. Can you choose your own topic with which to write an information text? It could be something we have studied in school or even a hobby or interest you have: ballet, Minecraft, volcanoes etc. Draft your work today. We will be continuing this next week so don't publish it in neat yet.

# The first quadrant



1



d) Write the coordinates of the points A, B, C and D.

A (  ,  )      C (  ,  )  
 B (  ,  )      D (  ,  )

b) Draw lines to join the points A to D to form a rectangle.

c) Write the coordinates of 4 different points in each column of the table.

Inside the rectangle	Outside the rectangle	On the perimeter of the rectangle
(5, 3)		

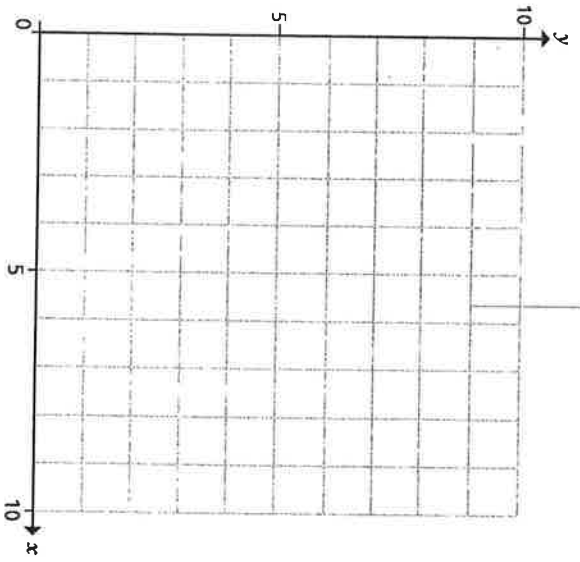


2

Here are coordinates for three vertices of a rectangle.

- (3, 6)      (7, 3)      (7, 6)

a) Plot the coordinates.



b) Write the coordinates of the fourth vertex.

(  ,  )

3

Here are coordinates for two vertices of a square.

- (5, 2)      (5, 6)

What could the coordinates of the other two vertices be? Give two possible solutions.

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



4 a) Write a set of coordinates that would join to make a right-angled triangle.

\_\_\_\_\_

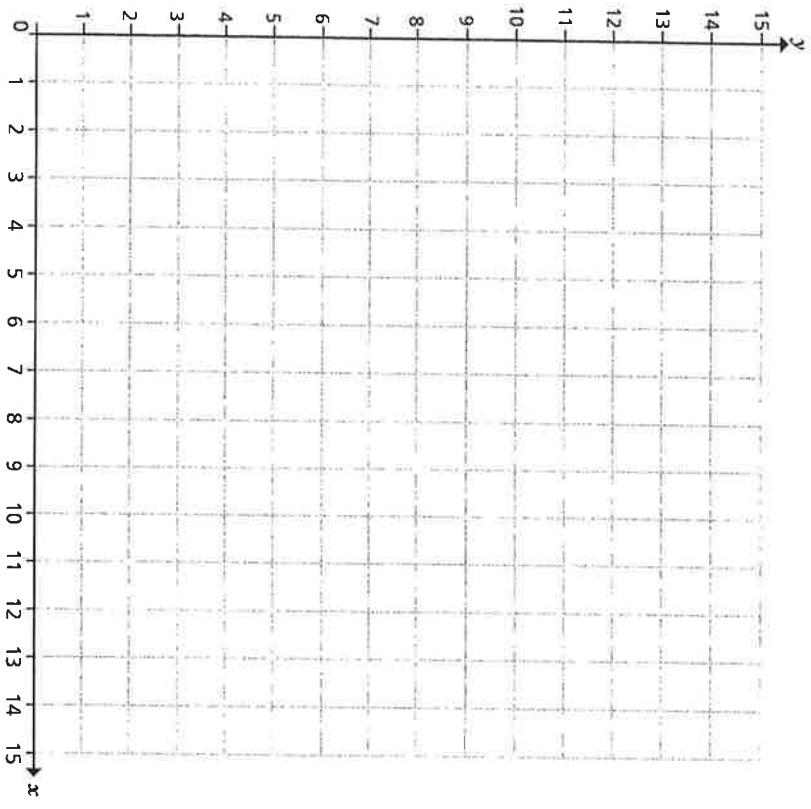
b) Write a set of coordinates that would join to make a pentagon.

\_\_\_\_\_

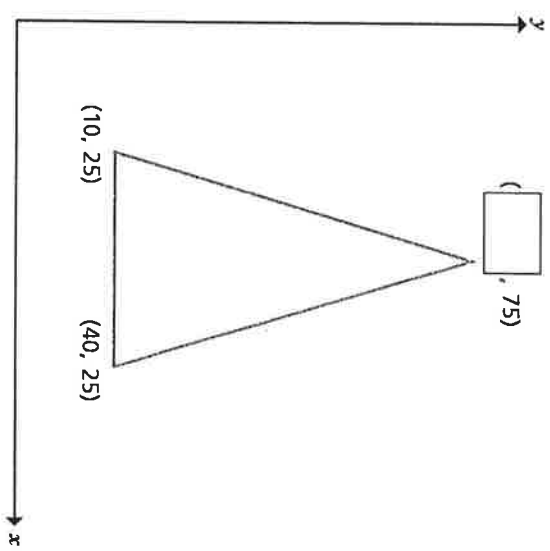
c) Write a set of coordinates that would join to make a trapezium.

\_\_\_\_\_

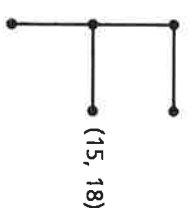
d) Plot your points from parts a), b) and c) to check you are correct.



5 Complete the coordinate for the isosceles triangle.



6 Eva has drawn an F on a coordinate grid. One point is labelled. Suggest possible values for the other points and label them on the diagram.

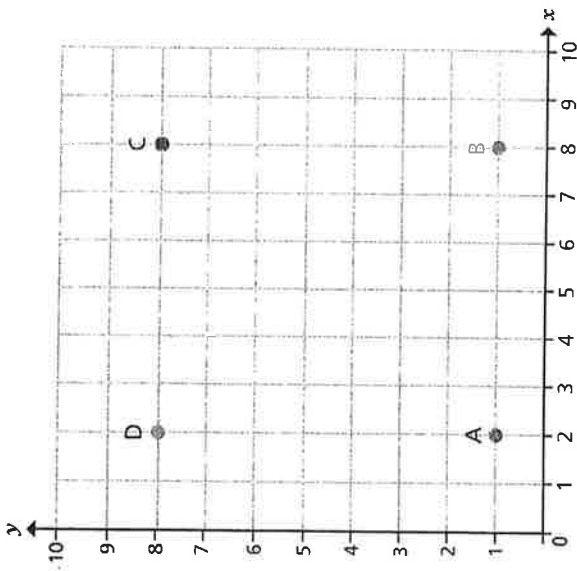


Compare answers with a partner.  
Is there more than one possible set of answers?

Compare shapes with a partner.  
What is the same? What is different?



# The first quadrant



a) Write the coordinates of the points A, B, C and D.

A (  ,  )      C (  ,  )  
 B (  ,  )      D (  ,  )

b) Draw lines to join the points A to D to form a rectangle.

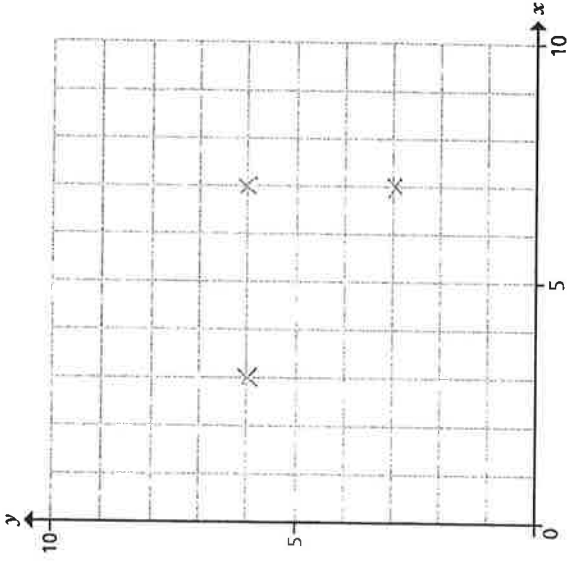
c) Write the coordinates of 4 different points in each column of the table. *Various answers.*

Inside the rectangle	Outside the rectangle	On the perimeter of the rectangle
(5, 3)		

2 Here are coordinates for three vertices of a rectangle.

- (3, 6)      (7, 3)      (7, 6)

a) Plot the coordinates.



b) Write the coordinates of the fourth vertex.

(  ,  )

3 Here are coordinates for two vertices of a square.

- (5, 2)      (5, 6)

What could the coordinates of the other two vertices be?

Give two possible solutions.

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

*Various answers.*

- 4 Write a set of coordinates that would join to make a right-angled triangle.

$(1, 14)$   $(4, 14)$   $(1, 1)$

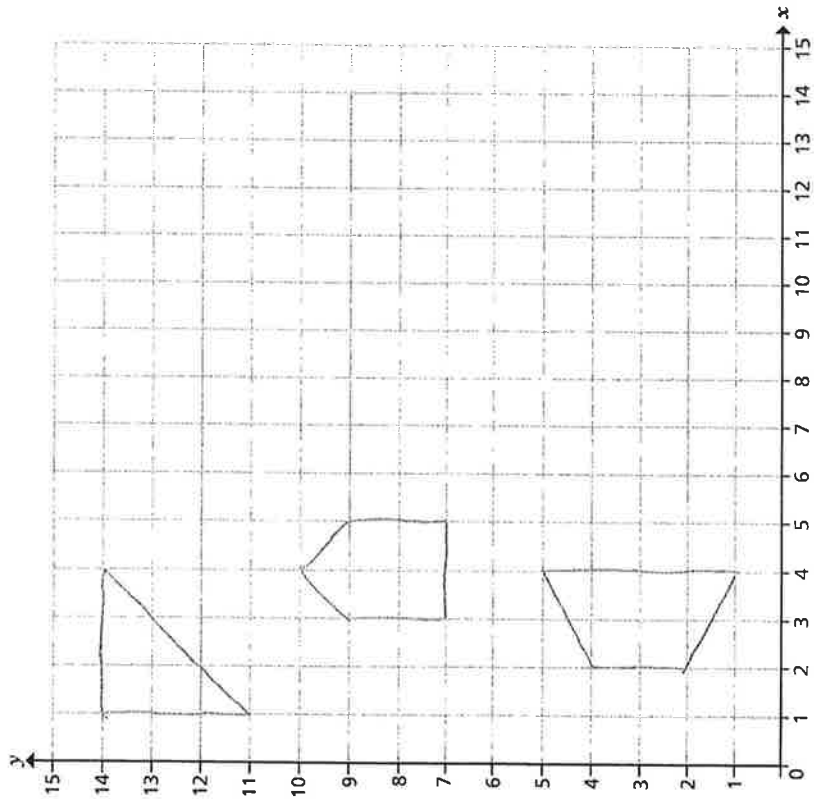
- b) Write a set of coordinates that would join to make a pentagon.

$(4, 10)$   $(3, 9)$   $(5, 9)$   $(3, 7)$   $(5, 7)$

- c) Write a set of coordinates that would join to make a trapezium.

$(4, 1)$   $(2, 2)$   $(2, 4)$   $(4, 5)$

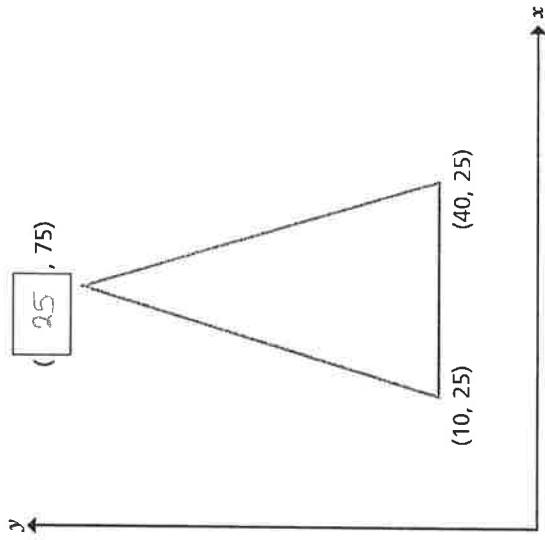
- d) Plot your points from parts a), b) and c) to check you are correct.



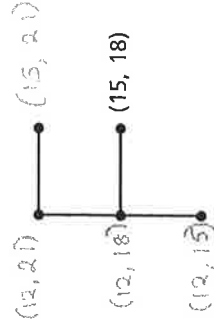
Compare shapes with a partner.

What is the same? What is different?

- 5 Complete the coordinate for the isosceles triangle.



- 6 Eva has drawn an F on a coordinate grid. One point is labelled. Suggest possible values for the other points and label them on the diagram. *Various answers e.g.*



Compare answers with a partner.

Is there more than one possible set of answers?

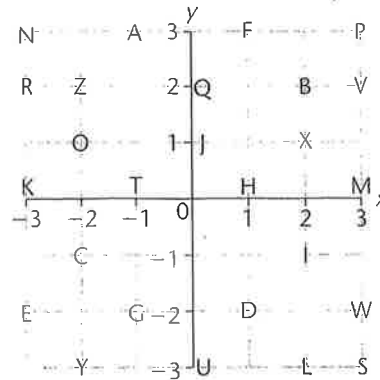
**TARGET** To describe positions on the full co-ordinate grid.

The position of a point on a grid is given by its x and y co-ordinates.

The x co-ordinate always comes first.

**Examples**

- Point O is (-2, 1)      Point X is (2, 1)  
 Point C is (-2, -1)      Point I is (2, -1)



**A**



Use the above grid.  
 Which letter is at:

- 1 (3, 4)      5 (4, 3)  
 2 (5, 5)      6 (3, 1)  
 3 (0, 3)      7 (2, 2)  
 4 (1, 1)      8 (5, 0)?

Give the position of:

- 9 G      13 V  
 10 C      14 P  
 11 O      15 L  
 12 K      16 Q.

Use the grid to write:

- 17 your name  
 18 your school  
 19 your favourite colour  
 20 your favourite meal.

**B**

Use the above grid.  
 Which letter is at:

- 1 (3, 2)      5 (-2, 2)  
 2 (-3, -2)      6 (1, -2)  
 3 (0, 1)      7 (-1, 0)  
 4 (2, -3)      8 (-2, -1)?

Give the position of:

- 9 W      13 K  
 10 Y      14 P  
 11 Q      15 U  
 12 G      16 C.

Each set of co-ordinates spells out the name of a European capital city, but one letter has been moved. Find the city.

- 17 (3, -3)      19 (-2, 1)  
 (-2, 1)      (3, 0)  
 (2, -3)      (-3, -2)  
 (-2, 1)      (-3, 2)  
 18 (-1, 0)      20 (2, -1)  
 (1, 0)      (3, -3)  
 (-3, -2)      (-2, 1)  
 (-3, 3)      (1, 3)  
 (-1, 3)      (-1, 3)  
 (3, -3)
- 21 Write in co-ordinates the countries of which these cities are the capitals.

**C**

Use the above grid. Find the European capital cities.

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

- 5 Write in co-ordinates the countries of which these cities are the capitals.
- 6 A (-3, 1), B (1, 3) and C (3, -1) are three vertices of square ABCD. Draw a grid like the one above, plot the points and complete the square.
- 7 Find the midpoint of line:  
 a) AB      c) CD      e) BD  
 b) BC      d) AD      f) AC.

A

- 1 E 9 (5, 1)
- 2 N 10 (2, 5)
- 3 D 11 (1, 3)
- 4 W 12 (0, 2)

B

- 1 V 5 Z 9 (3, -2)
- 2 E 6 D 10 (-2, -3)
- 3 J 7 T 11 (0, 2)
- 4 L 8 C 12 (-1, -2)

17 OSLO

- 13 (-3, 0)
- 14 (3, 3)
- 15 (0, -3)
- 16 (-2, -1)

21 17. NORWAY

- 18 ATHENS 8 C 12 (-1, -2)
- 19 ROME 9 (3, -2)
- 20 SOFIA 10 (-2, -3)

22 18. GREECE

- 19. ITALY 2 (2, -1)
- 20. BULGARIA 2 (2, 2)

C

- 1 LJUBLJANA 1 (1, 1)
- 2 VADUZ 2 (2, 4)
- 3 SKOPJE 3 (3, 1)
- 4 REYKJAVIK 4 (4, 4)
- 5 1. SLOVENIA 5 (5, 5)

4. ICELAND

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

2. LIECHTENSTEIN

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

6 D is point (-1, -3)

- 7 a) (-1, 2)
- 7 b) (2, 1)
- 7 c) (1, -2)
- 7 d) (-2, -1)
- 7 e) (0, 0)
- 7 f) (0, 0)

A

- 1 a) D is point (3, 5)
- b) H is point (6, 3)
- 2. isosceles triangle
- 3. rhombus
- 4. right-angled triangle
- 5. rectangle

B

- 1. rhombus 5 a) (3, 6)
- 2. rectangle 6 a) (-2, 2)
- 3. square 7 a) (-1, 0)
- 4. parallelogram 8 a) (-3, -1)

C

- 2 (-2, 3) (0, -3)
- 3 a) (-4, 3) (0, -5)
- 3 b) (-2, 5) (2, -3)
- 4 (-6, -4)

A

- 3 a) (5, 8)
- 3 b) (0, 6)
- 3 c) (5, 3)
- 3 d) (7, 3)

B

- 1 a) (1, 1)
- 1 b) (6, 7)
- 1 c) (0, 6)
- 1 d) (5, 7)

C

- 2 a) (0, 2)
- 2 b) (5, 6)
- 2 c) (0, 5)
- 2 d) (4, 5)

C

- 3 A a) (-3, -2)
- 3 b) (-3, 2)
- 3 c) (-3, 2)
- 3 d) (-1, 4)

A

- 3 A a) (3, 6)
- 3 B a) (5, 2)
- 3 C a) (-4, 1)
- 3 D a) (-2, 3)

C

- 4 a) (3, 1)
- 4 b) (4, 5)
- 4 c) (0, 4)
- 4 d) (5, 7)

A

- 5 A a) (3, 6)
- 5 B a) (5, 4)
- 5 C a) (2, 5)
- 5 D a) (0, 1)
- 5 E a) (2, 1)
- 5 F a) (6, 0)
- 5 G a) (4, 4)
- 5 H a) (6, 2)

A

- 3 a) (3, 0)
- 3 b) (5, 2)
- 3 c) (4, 5)
- 3 d) (6, 1)
- 3 e) (2, 5)
- 3 f) (0, 1)
- 3 g) (2, 1)
- 3 h) (6, 0)

A

- 3 a) (3, 0)
- 3 b) (5, 2)
- 3 c) (4, 5)
- 3 d) (6, 1)
- 3 e) (2, 5)
- 3 f) (0, 1)
- 3 g) (2, 1)
- 3 h) (6, 0)



# The First Quadrant

## Notes and Guidance

Children recap work from Year 4 and Year 5 by reading and plotting coordinates in the first quadrant (the quadrant where both  $x$  and  $y$  coordinates are positive.).

Children draw shapes on a 2-D grid from given coordinates and may use their increasing understanding to write coordinates for shapes without plotting the points.

## Mathematical Talk

Which axis do we look at first?

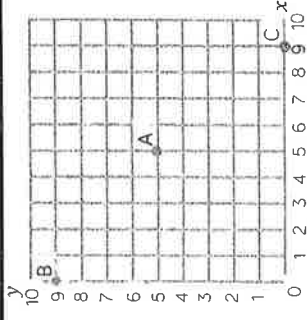
Does joining up the vertices already given help you to draw the shape?

Can you draw a shape in the first quadrant and describe the coordinates of the vertices to a friend?

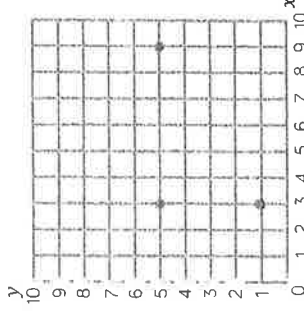
## Varied Fluency



Whitney plots three coordinates. Write down the coordinates of points A, B and C.



Tommy is drawing a rectangle on a grid. Plot the final vertex of the rectangle. Write the coordinate of the final vertex.

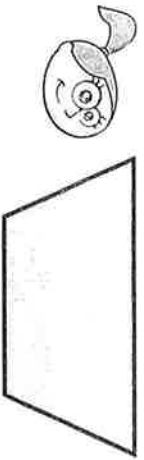


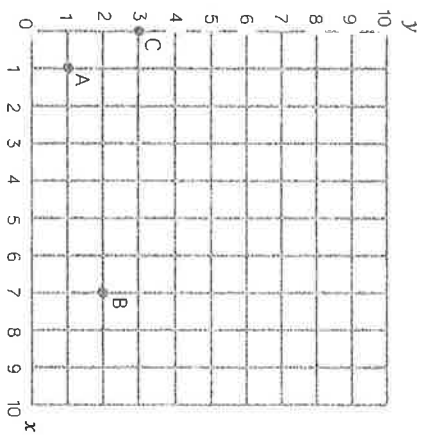
Draw the vertices of the polygon with the coordinates  $(7, 1)$ ,  $(7, 4)$  and  $(10, 1)$

What type of polygon is the shape?

# The First Quadrant

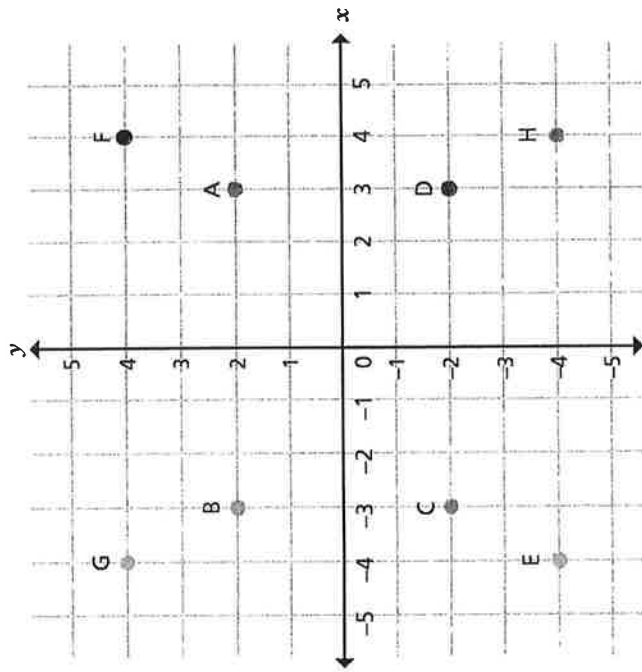
## Reasoning and Problem Solving

<p>Eva is drawing a trapezium. She wants her final shape to look like this:</p>  <p>Eva uses the coordinates (2, 4), (4, 5), (1, 6) and (5, 6). Will she draw the shape that she wants to? If not, can you correct her coordinates?</p>	<p>Eva has plotted the coordinate (4, 5) incorrectly. This should be plotted at (4, 4) to make the trapezium that she wanted to draw (an isosceles trapezium).</p>
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<p>Mo has written the coordinates of points A, B and C.</p> <p>A (1, 1)    B (2, 7)    C (3, 0)</p> <p>Mark Mo's work and correct his mistakes.</p>  <p>Explain why Mo could not make the same mistake for point A as he made for points B and C.</p>	<p>A is correct. B and C have been plotted incorrectly because Mo has plotted the x and y coordinates the wrong way round.</p> <p>Because the coordinates for point A are both the same number it does not matter if Mo incorrectly reads the y coordinate as the first and the x coordinate as the second.</p>
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# Four quadrants

1

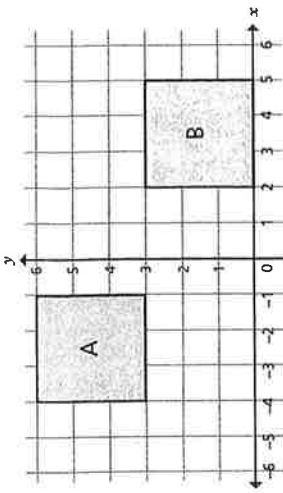


Write the coordinates of points A to H.

- A (  ,  )
- B (  ,  )
- C (  ,  )
- D (  ,  )

- E (  ,  )
- F (  ,  )
- G (  ,  )
- H (  ,  )

2

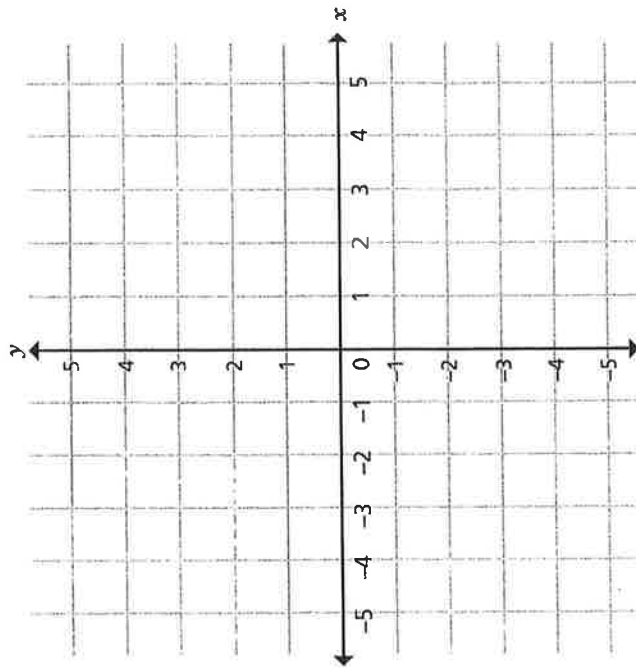


Write the coordinates for each vertex of each square.

square A = \_\_\_\_\_

square B = \_\_\_\_\_

3



a) Plot these coordinates.

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

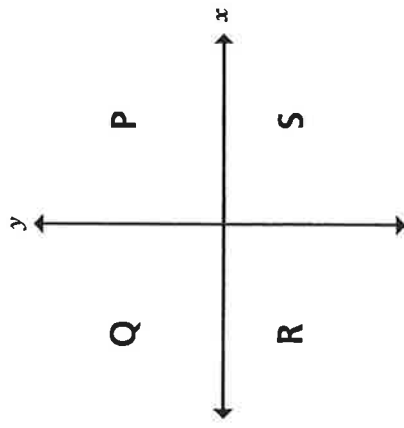
b) Join the points you have plotted to form a quadrilateral.

c) Complete the sentence to describe the shape you have drawn.

This quadrilateral is a \_\_\_\_\_



4



a) Write coordinates for 4 possible points in each quadrant.

Quadrant P		Quadrant R	
( <input type="text"/> , <input type="text"/> )	( <input type="text"/> , <input type="text"/> )	( <input type="text"/> , <input type="text"/> )	( <input type="text"/> , <input type="text"/> )
( <input type="text"/> , <input type="text"/> )	( <input type="text"/> , <input type="text"/> )	( <input type="text"/> , <input type="text"/> )	( <input type="text"/> , <input type="text"/> )
Quadrant Q		Quadrant S	
( <input type="text"/> , <input type="text"/> )	( <input type="text"/> , <input type="text"/> )	( <input type="text"/> , <input type="text"/> )	( <input type="text"/> , <input type="text"/> )
( <input type="text"/> , <input type="text"/> )	( <input type="text"/> , <input type="text"/> )	( <input type="text"/> , <input type="text"/> )	( <input type="text"/> , <input type="text"/> )

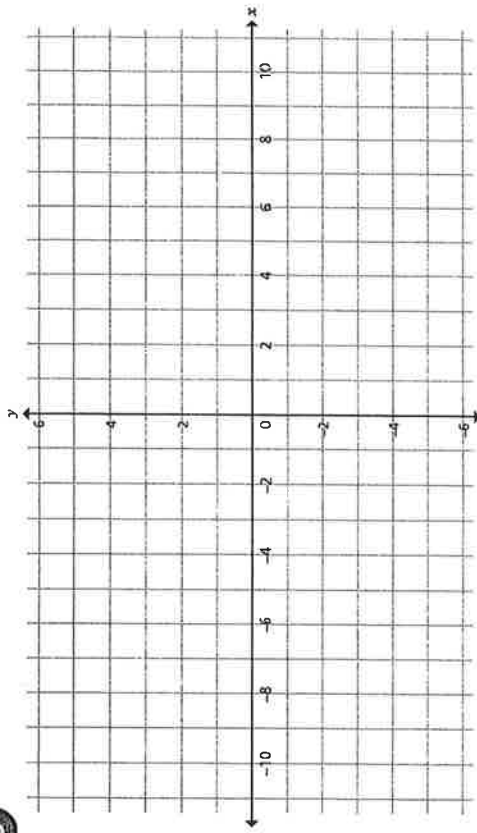
b) Write 4 different coordinates that are not in any single quadrant.

(, ) (, )

(, ) (, )

What do you notice?

5



a) Plot these coordinates.

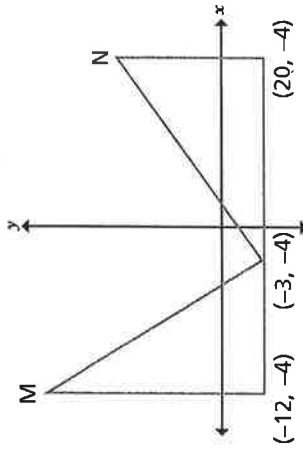
- (-8, 4) (4, -2) (10, -5) (-4, 2) (-6, 3)

b) Write three other coordinates that would be in the same line.

\_\_\_\_\_

6

The diagram shows two identical triangles.

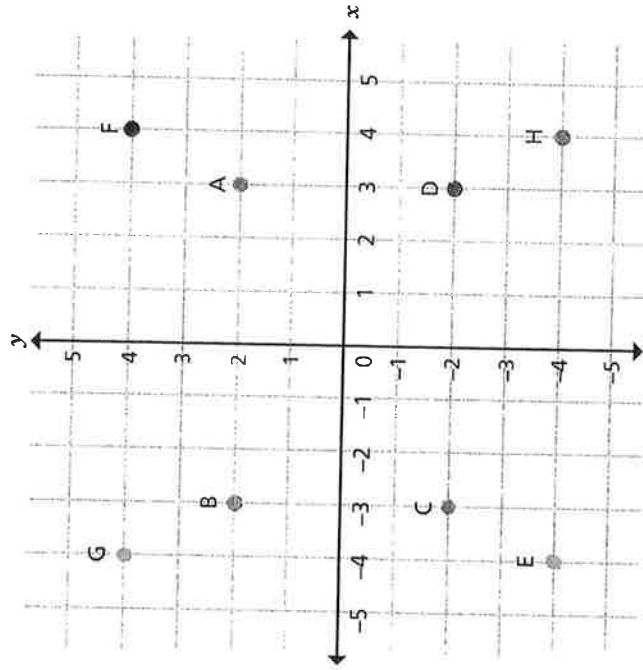


Write the coordinates of points M and N.

M (  ,  )      N (  ,  )

# Four quadrants

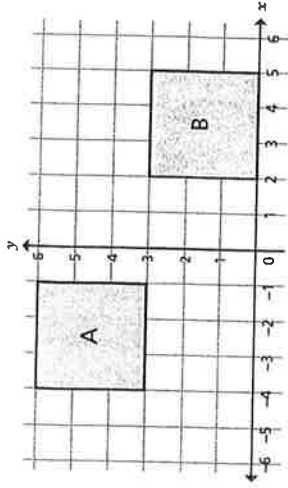
1



Write the coordinates of points A to H.

- A (  ,  )
- B (  ,  )
- C (  ,  )
- D (  ,  )
- E (  ,  )
- F (  ,  )
- G (  ,  )
- H (  ,  )

2

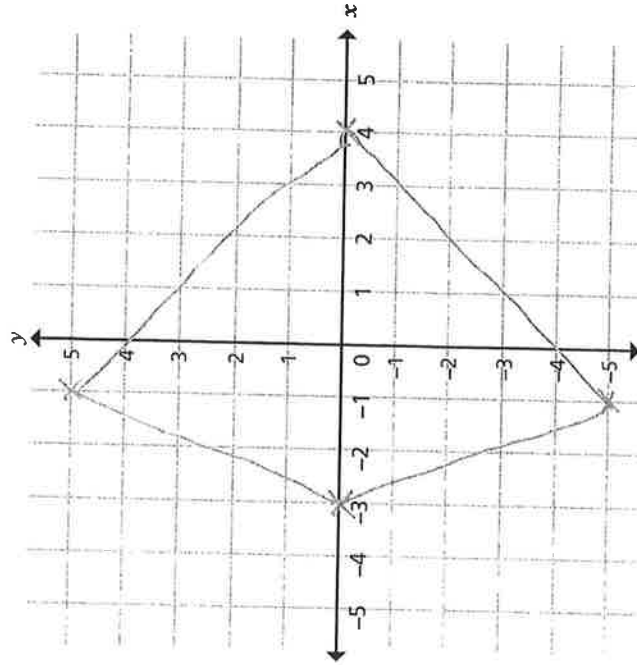


Write the coordinates for each vertex of each square.

square A = (-4, 6) (-1, 6) (-1, 3) (-4, 3)

square B = (2, 3) (5, 3) (5, 0) (2, 0)

3



a) Plot these coordinates.

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

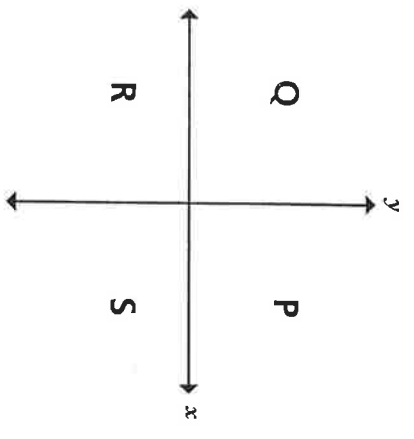
b) Join the points you have plotted to form a quadrilateral.

c) Complete the sentence to describe the shape you have drawn.

This quadrilateral is a kite



4



Various answers.  
 a) Write coordinates for 4 possible points in each quadrant.

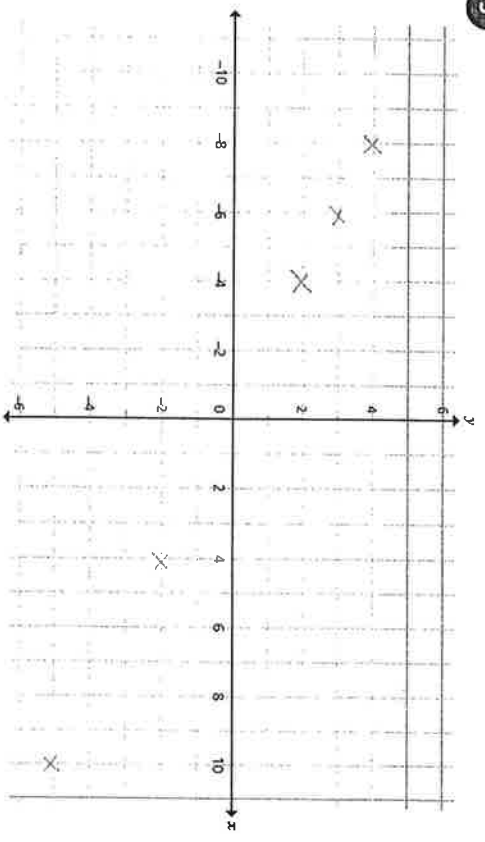
Quadrant P		Quadrant R	
(2, 4)	(71, 60)	(-4, -11)	(-1, -1)
(3, 1)	(5, 17)	(-19, -27)	(-8, -9)
Quadrant Q		Quadrant S	
(-7, 11)	(-4, 1)	(2, -5)	(30, -4)
(-5, 21)	(-100, 2)	(17, -12)	(6, -1)

b) Write 4 different coordinates that are not in any single quadrant.

- (3, 0)
- (0, 0)
- (0, 4)
- (-7, 0)

What do you notice?

5



a) Plot these coordinates.

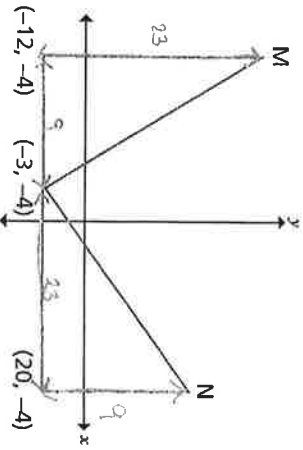
- (-8, 4)
- (4, -2)
- (10, -5)
- (-4, 2)
- (-6, 3)

b) Write three other coordinates that would be in the same line.

- (-2, 0)
- (0, 0)
- (2, -1)

6

The diagram shows two identical triangles.



Write the coordinates of points M and N.

- M (  ,  )
- N (  ,  )

