

Year 6

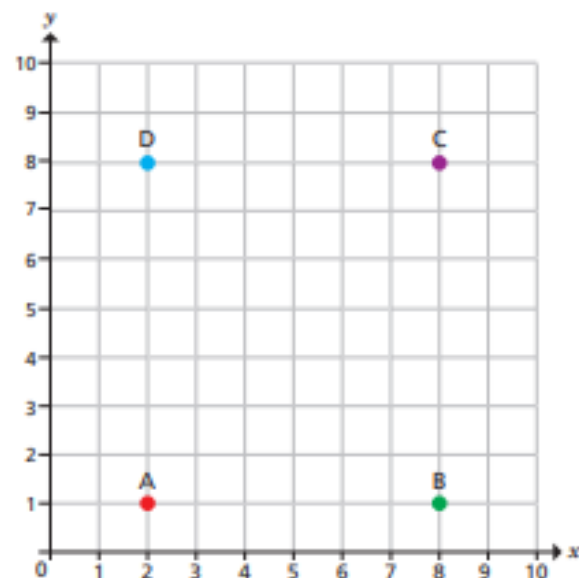
Home learning

Pack 2



## The first quadrant

1



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

A (  ,  )

C (  ,  )

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.

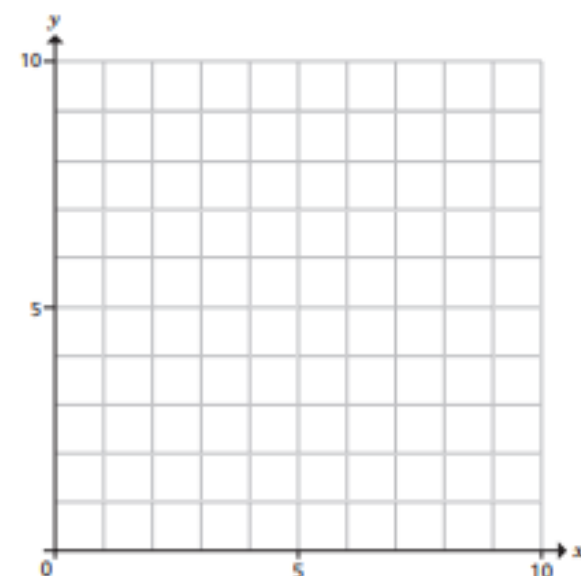


2

Here are coordinates for three vertices of a rectangle.

(3, 6)      (7, 3)      (7, 6)

a) Plot the coordinates.

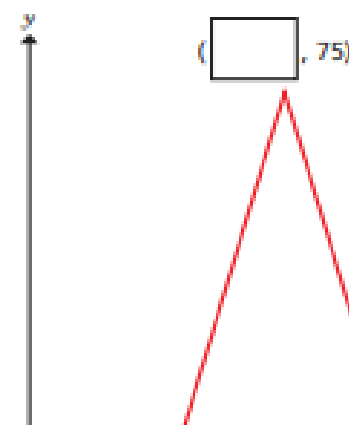


b) Write the coordinates of the fourth vertex.

(  ,  )

5

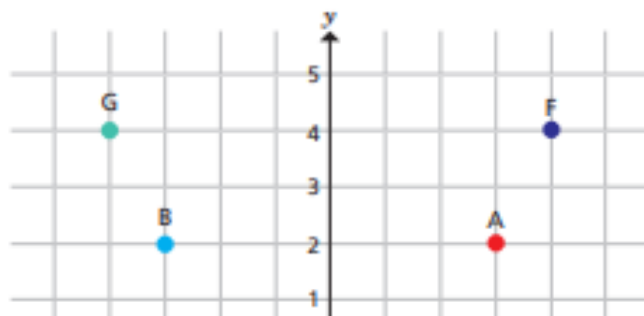
Complete the coordinate for the isosceles triangle.



## Four quadrants

White  
Rose  
Maths

1



2

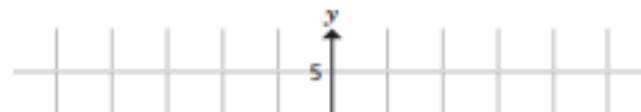


Write the coordinates for each vertex of each square.

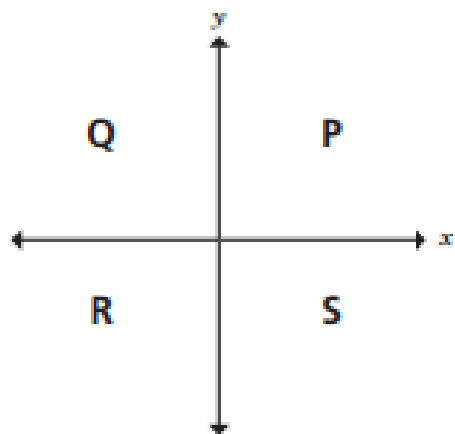
square A = \_\_\_\_\_

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

3



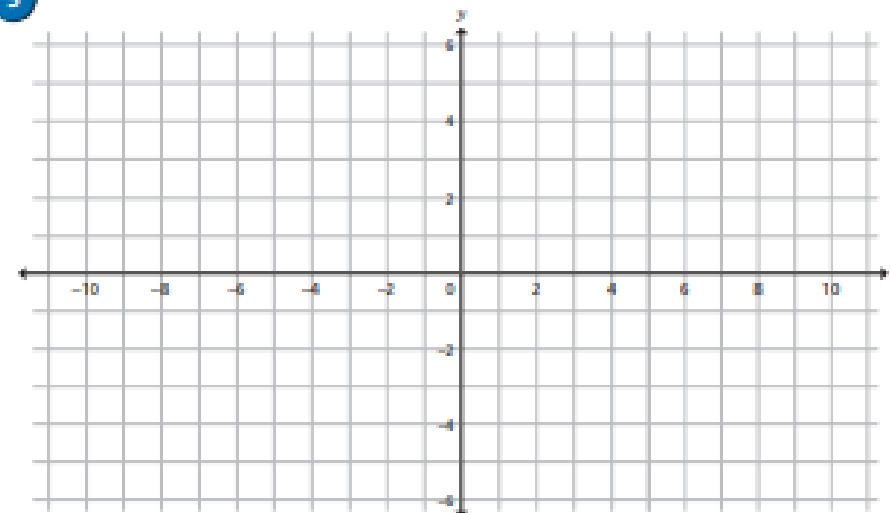
4



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"/> )

5

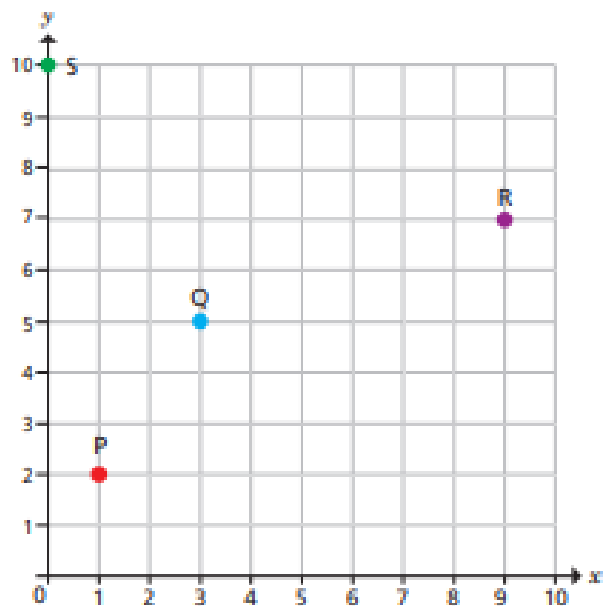


a) Plot these coordinates.

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

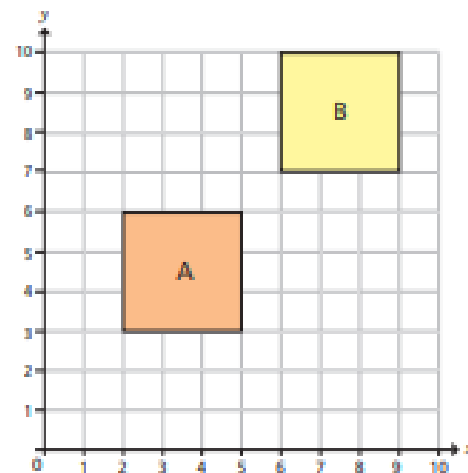
# Translations

1



Describe the translations

2



The translation  
from A to B is  
1 right and 1 up.



Do you agree with Rosie? \_\_\_\_\_

Explain your answer.

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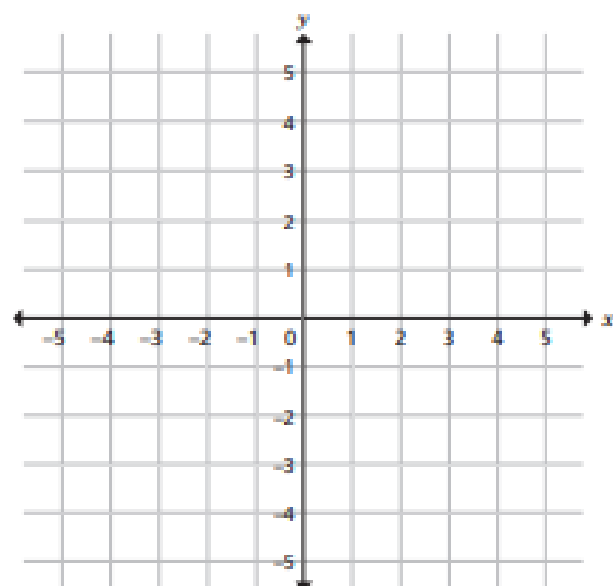
3

Translate the triangle 6 left.

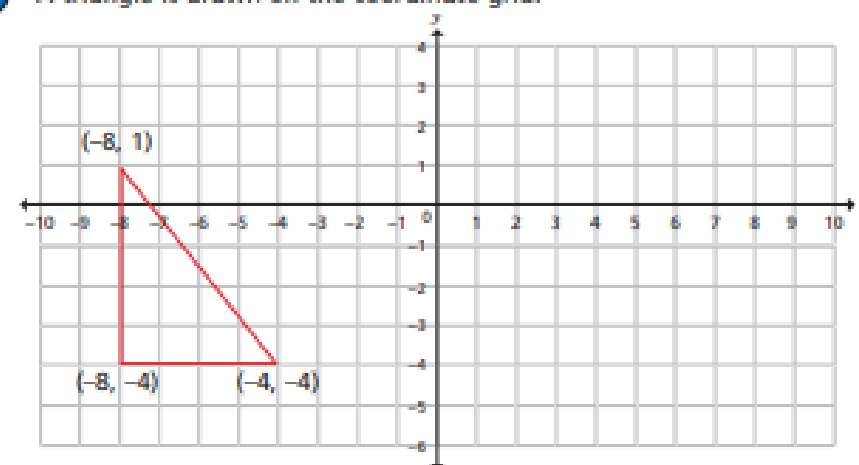
- 4 These coordinates form a quadrilateral:  $(-5, 5)$ ,  $(-5, 1)$ ,  $(-1, 4)$ ,  $(-1, 2)$

It is translated 3 right and 4 down.

Draw the quadrilateral on the grid in its new position.



- 6 A triangle is drawn on the coordinate grid.



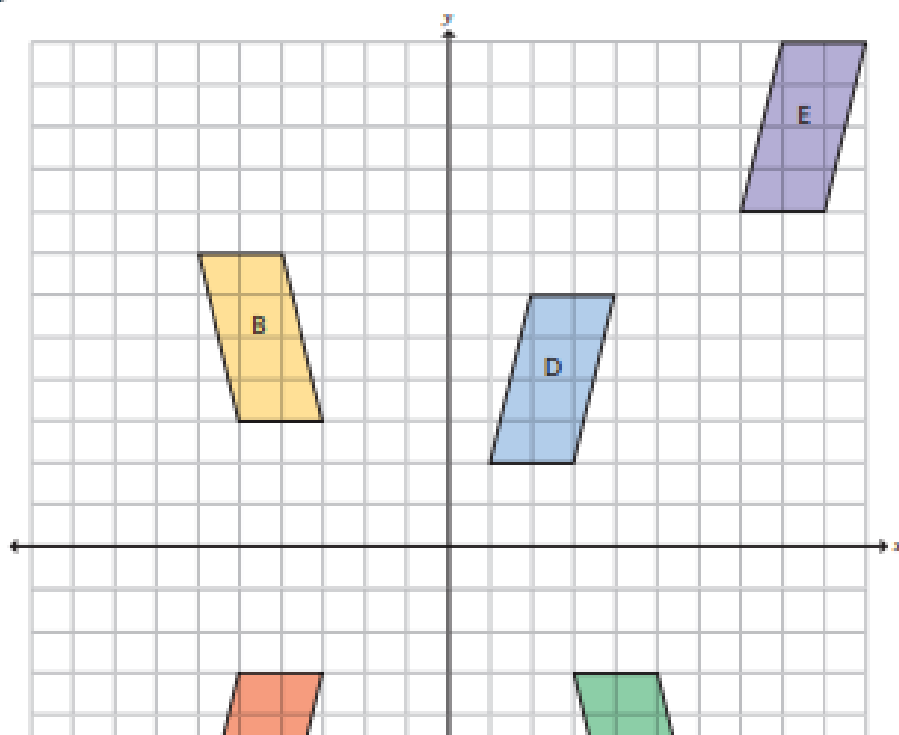
- a) Translate the triangle 9 right and 1 down.  
b) Tick the correct box for each coordinate.

Point	Inside the new triangle	Outside the new triangle	On the perimeter of the new triangle
$(0, 0)$			
$(4, -5)$			
$(2, -1)$			
$(-6, -3)$			
$(3, -4)$			

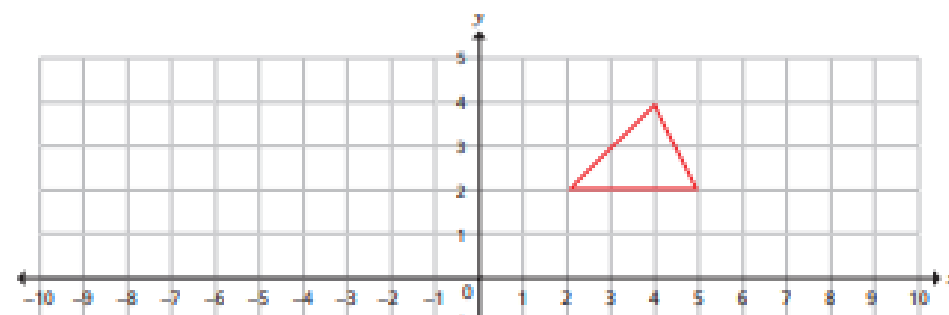
# Reflections

Maths

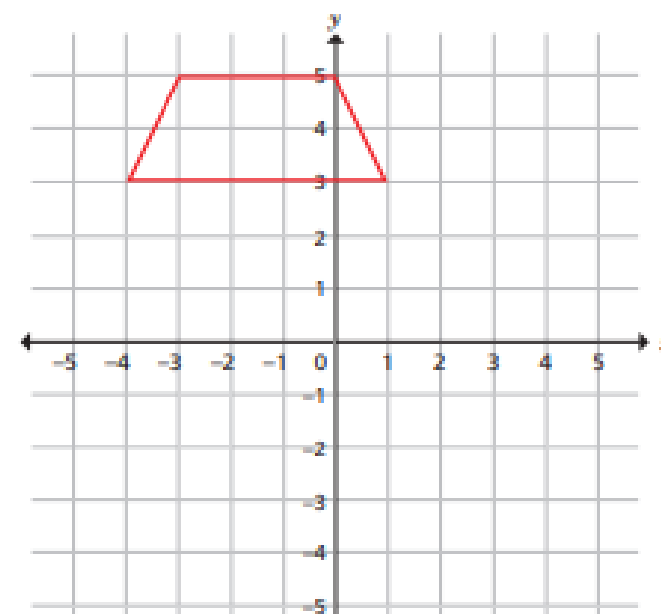
- Five parallelograms are shown on the coordinate grid.



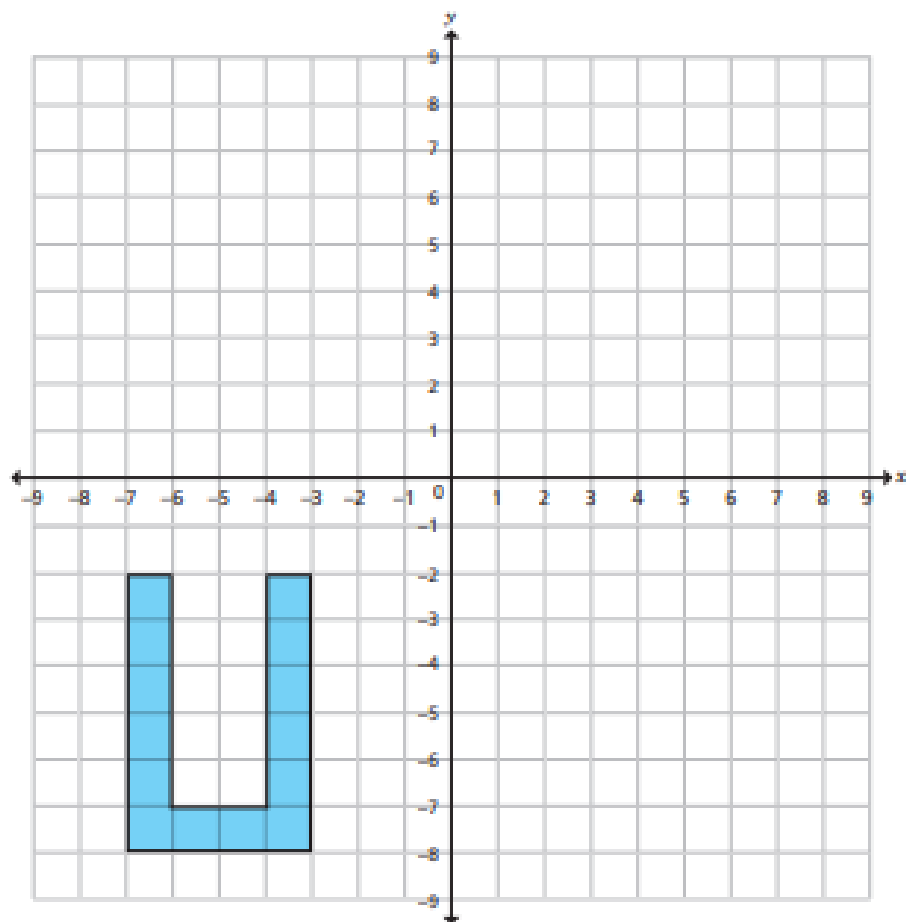
- Reflect the triangle in the y-axis.



- 



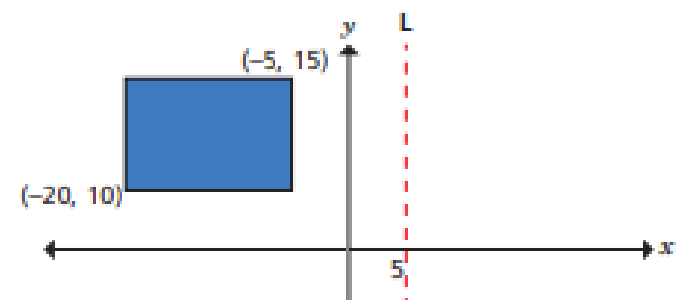
- 4 An octagon is shown on the coordinate grid.



- a) Reflect the shape in the  $x$ -axis.  
b) Translate the new shape 10 right and 10 down.



- 5 The shape is reflected in the line marked L.



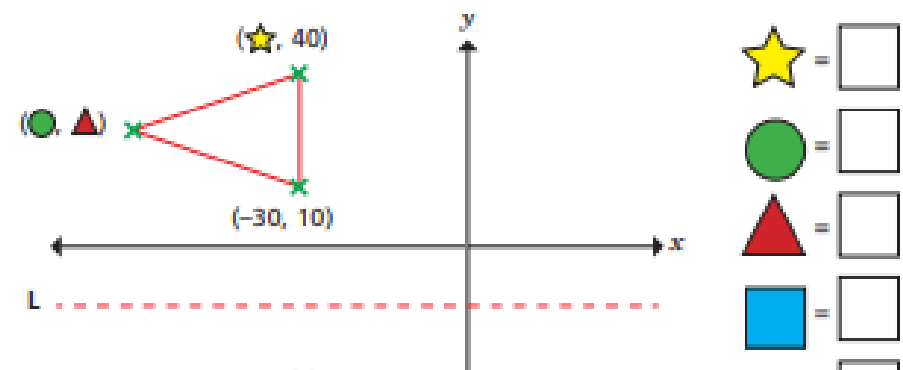
Work out the coordinates of the new vertices.

The new vertices are at

(, ) (, ) (, ) (, )

- 6 The isosceles triangle has been reflected in the line marked L.

Work out the missing values.



★ =

● =

▲ =

■ =



## Writing Prompts



**“Bad decisions  
make good stories.”**

– unknown

**Tell a story in which bad  
decisions are made.**

image via @lauracrocket



Make up a  
fairy tale  
that explains  
this picture.



**Tell a story from the perspective  
of a painting in a museum.**

- 1. Draw a  
monster.**
- 2. Write a  
plausible  
backstory  
for the  
monster that  
makes it a  
sympathetic  
character.**





**Describe each day of the week as if it was a person.**

Tell  
this  
story:

She was sure this was where he had disappeared.



image credit: Aron Wiesenfeld: <http://www.flickr.com/photos/48947217@N00/6002904823/sizes/l/in/photostream/>



Through a strange set of circumstances, you are being forced to spend the rest of your life as a ...



**SPARTAN, VIKING, KNIGHT, or ROMAN SOLDIER.**

Which do you choose? Why? Explain your choice. What do you think your life will be like? What do you think daily life will be like? Do you think you would enjoy it?



**IMAGINE,  
EXPLAIN,  
AND  
DESCRIBE  
WHO  
LIVES  
HERE.**

image by Jim Kazanjian: <http://www.kazanjian.net/>