

Name:



Maths Assessment Year 6 Term 3: Geometry - Position and Direction

You will need a ruler for this task.



1. Describe positions on the full coordinate grid (all four quadrants).
2. Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

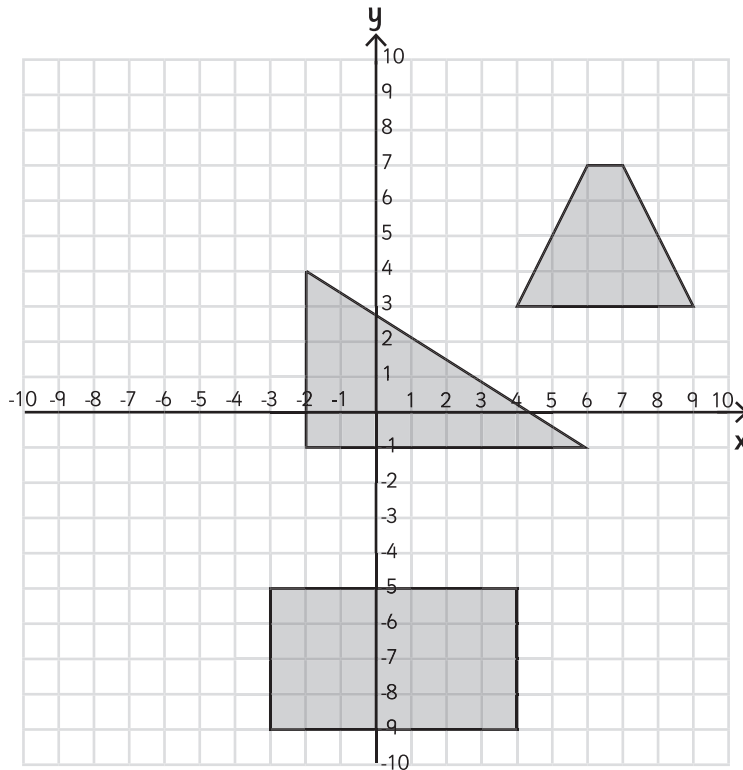
Name:

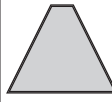
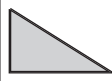

Date:

Maths Assessment Year 6 Term 3: Geometry - Position and Direction

1. Describe positions using all four quadrants of a coordinate grid.

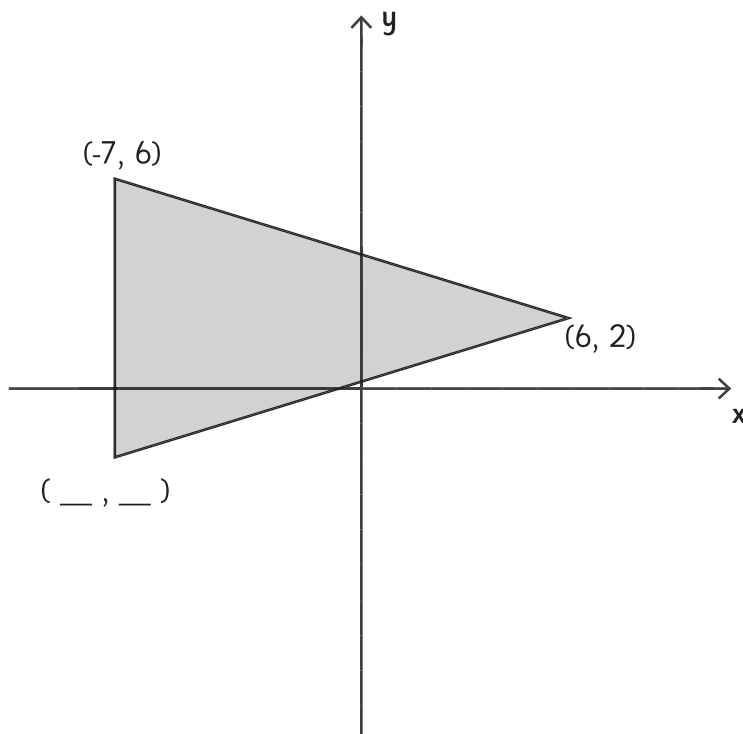
a) Label the coordinates of all of the vertices of each shape:



shape	coordinates
	(__ , __) (__ , __) (__ , __) (__ , __)
	(__ , __) (__ , __) (__ , __) (__ , __)
	(__ , __) (__ , __) (__ , __)

3 marks

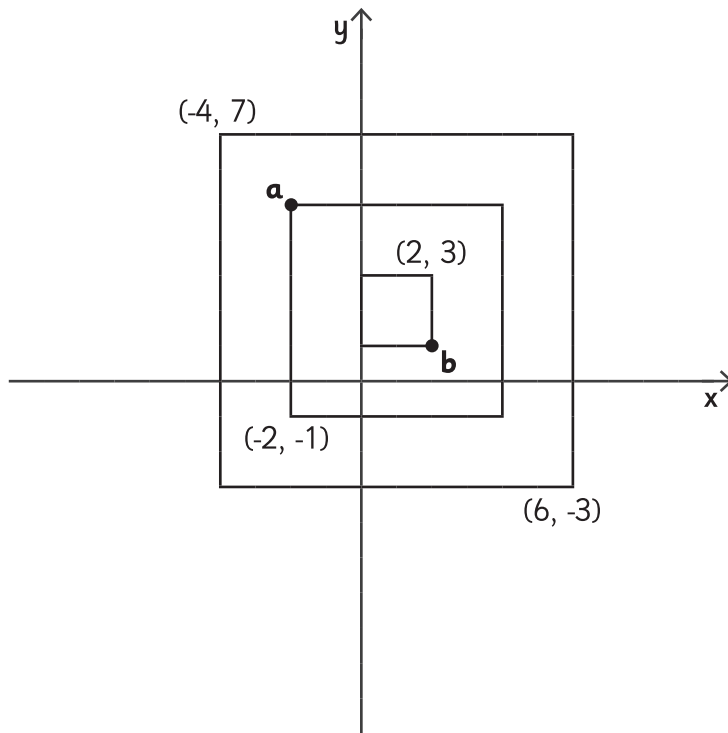
b) Label the missing coordinates of the vertices of this shape:



1 mark

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c) Here are 3 concentric rectangles on a coordinates grid. What are the coordinates of **a** and **b**?



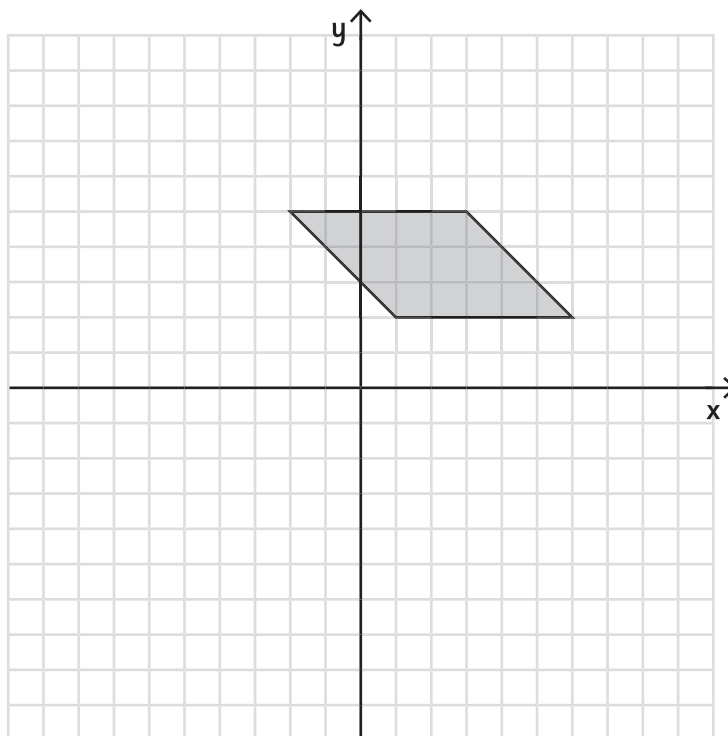
shape	coordinates
a	(__ , __)
b	(__ , __)



2 marks

2. Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

a) Reflect this parallelogram in the **x** axis.



1 mark

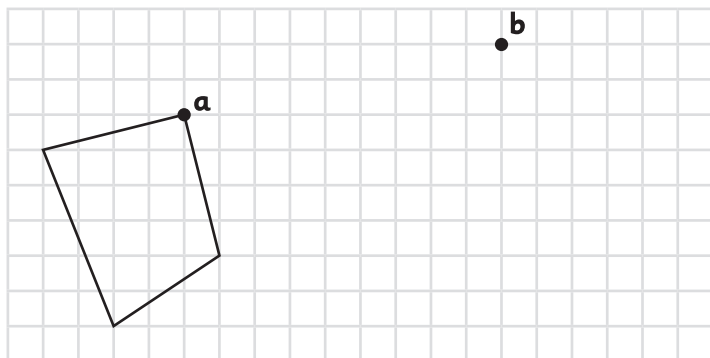


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b) The shape is translated so that point **a** moves to point **b**.

Draw the shape in its new position.

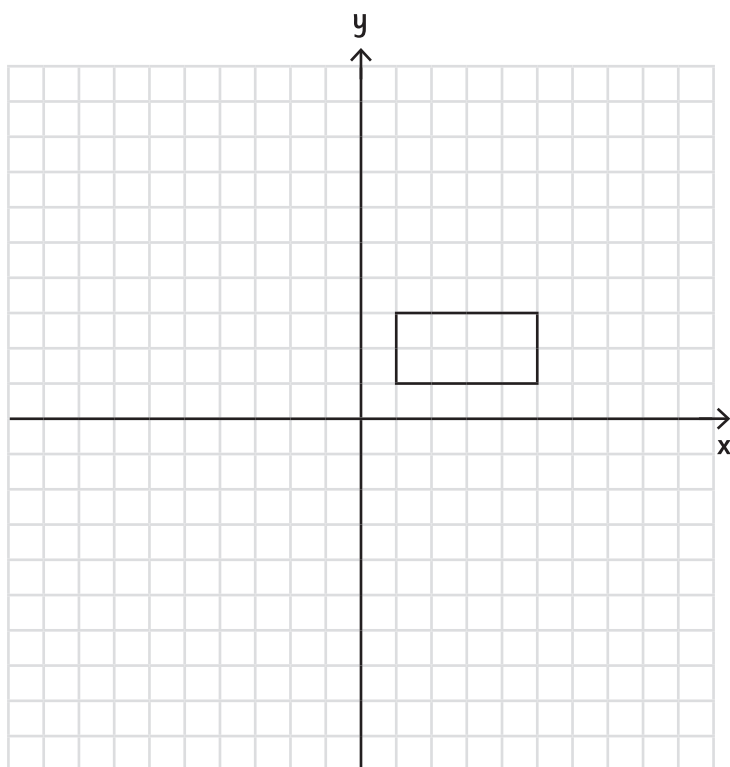
Use a ruler.



1 mark

c) This shape has been reflected in the **y** axis and then translated 5 places down.

Draw the shape in its original position.

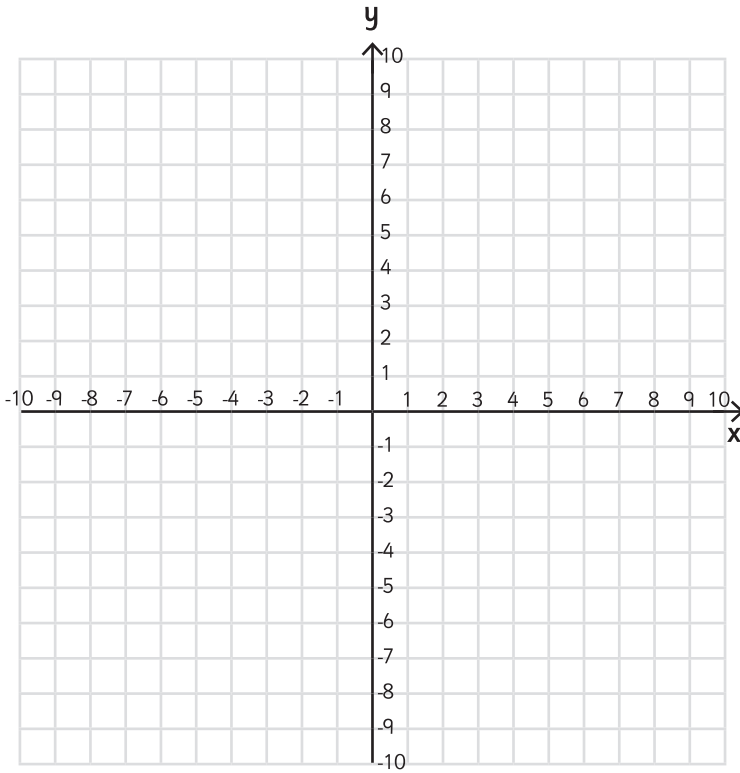


2 marks

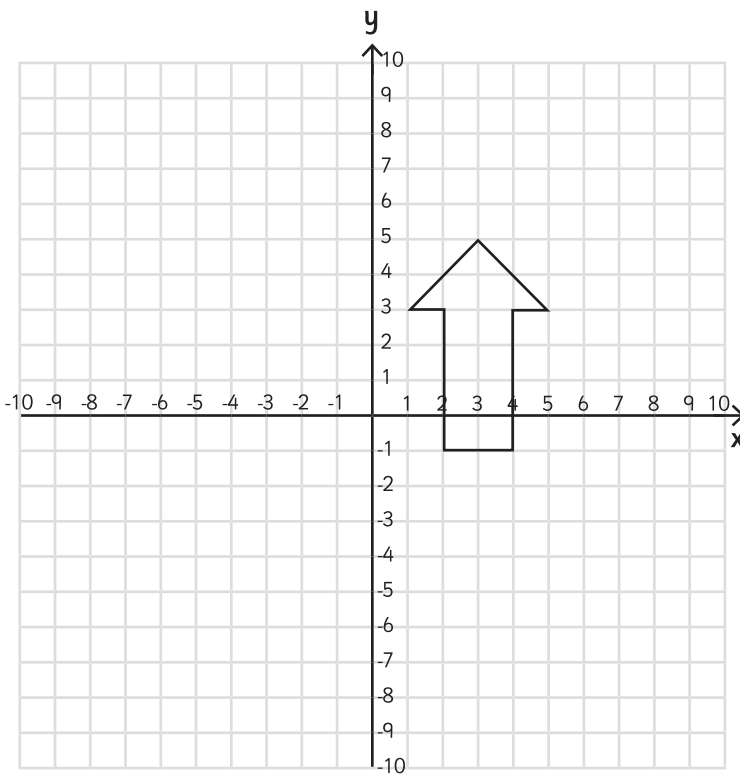


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d) Use these coordinates to draw a shape: $(-2,5)$ $(1,4)$ $(4,5)$ $(4,-1)$ $(1,0)$ $(-2,-1)$



e) Translate the shape 6 places to the left and 7 places down.



What is the new coordinate for the point of the arrow?



1 mark

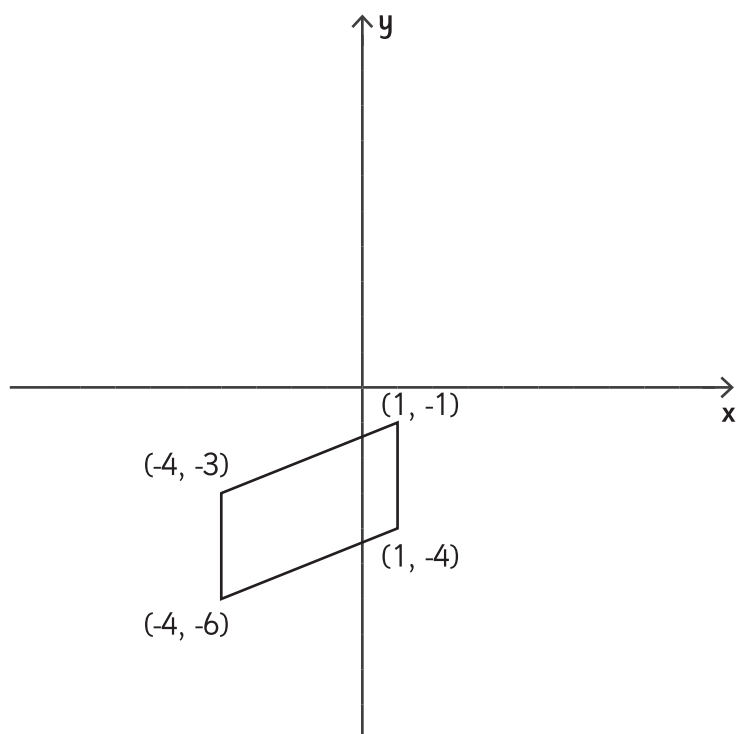


2 marks



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f) Translate this shape 5 places up.



Write down the new coordinates of its vertices.

(__ , __) (__ , __) (__ , __) (__ , __)

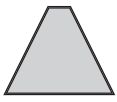
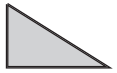

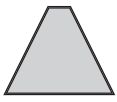
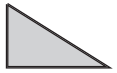

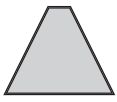
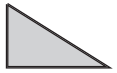

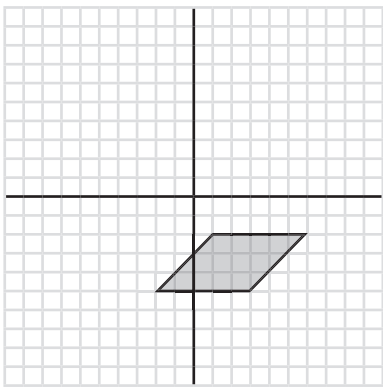
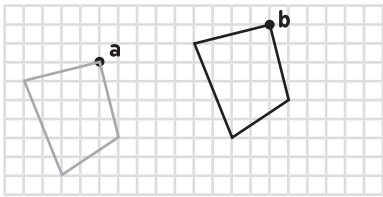
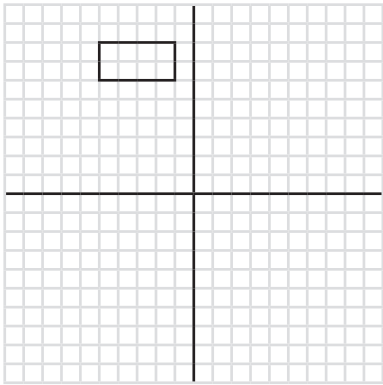
2 marks

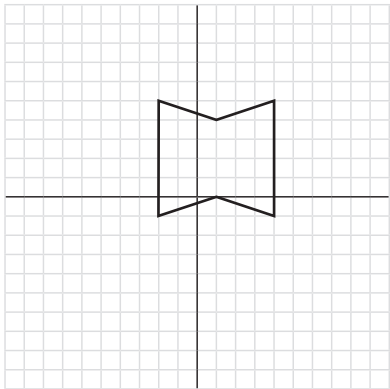
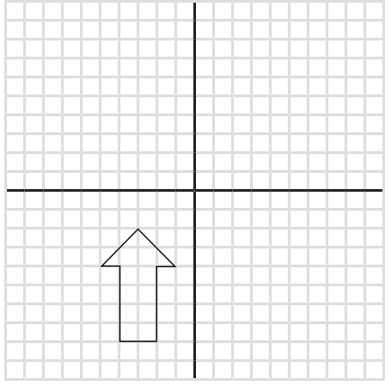
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Answer Sheet: Maths Assessment Year 6 Term 3:

Geometry - Position and Direction



question	answer	marks	notes								
1. Describe positions on the full coordinate grid (all four quadrants).											
a	<table border="1"> <thead> <tr> <th>shape</th> <th>coordinates</th> </tr> </thead> <tbody> <tr> <td></td> <td>$(6, 7) (7, 7) (9, 3) (4, 3)$</td> </tr> <tr> <td></td> <td>$(-2, 4) (6, -1) (-2, -1)$</td> </tr> <tr> <td></td> <td>$(-3, -5) (4, -5) (4, -9) (-3, -9)$</td> </tr> </tbody> </table>	shape	coordinates		$(6, 7) (7, 7) (9, 3) (4, 3)$		$(-2, 4) (6, -1) (-2, -1)$		$(-3, -5) (4, -5) (4, -9) (-3, -9)$	3	1 mark for each set of coordinates correctly identified. Accept coordinates in any order.
	shape	coordinates									
		$(6, 7) (7, 7) (9, 3) (4, 3)$									
	$(-2, 4) (6, -1) (-2, -1)$										
	$(-3, -5) (4, -5) (4, -9) (-3, -9)$										
b	$(-7, -2)$	1									
c	a = -2, 5 b = 2, 1	2									
2. Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.											
a		1									
b		1									
c		2									

question	answer	marks	notes
d		1	
e	 <p data-bbox="268 1144 951 1211">What is the new coordinate for the point of the arrow? (-3, -2)</p>	2	
f	(1,4) (1,1) (-4,-1) (-4,2)	2	
		Total 15	