

# Plotting Points

## Challenge 1

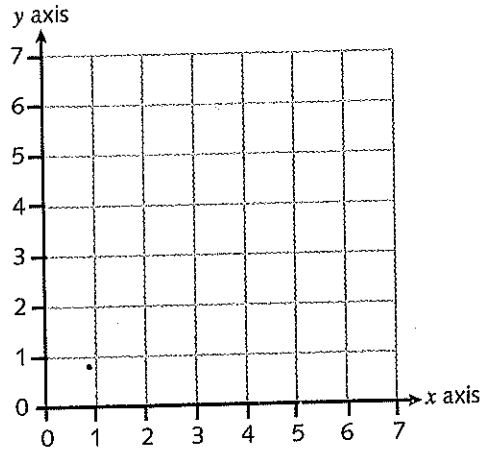
1 a) Plot these points on the grid.

A(2,6)

B(6,6)

C(2,2)

D(6,2)



b) Join the points with straight lines. What shape is ABCD?

\_\_\_\_\_

c) What is point (0,0) called? \_\_\_\_\_

4 marks

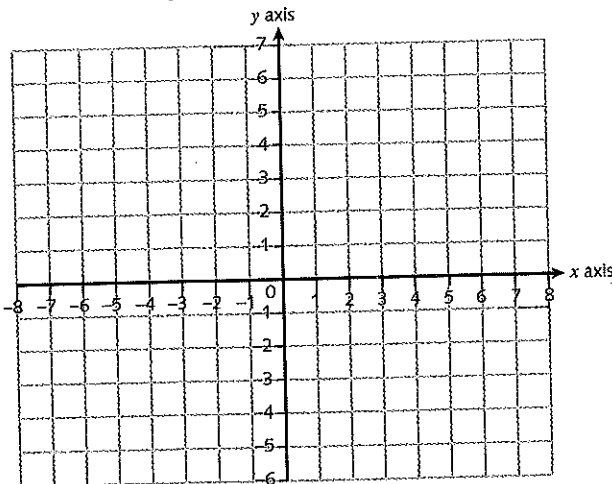
1 mark

1 mark

Marks..... /6

## Challenge 2

1 a) Plot these points on the grid. A(-2,4) B(2,2) C(-2,-4) D(-6,-2)



b) Join the points with straight lines. What shape is ABCD?

\_\_\_\_\_

c) Find the point half way along line CD. What are its coordinates?

\_\_\_\_\_

4 marks

1 mark

1 mark

Marks..... /6

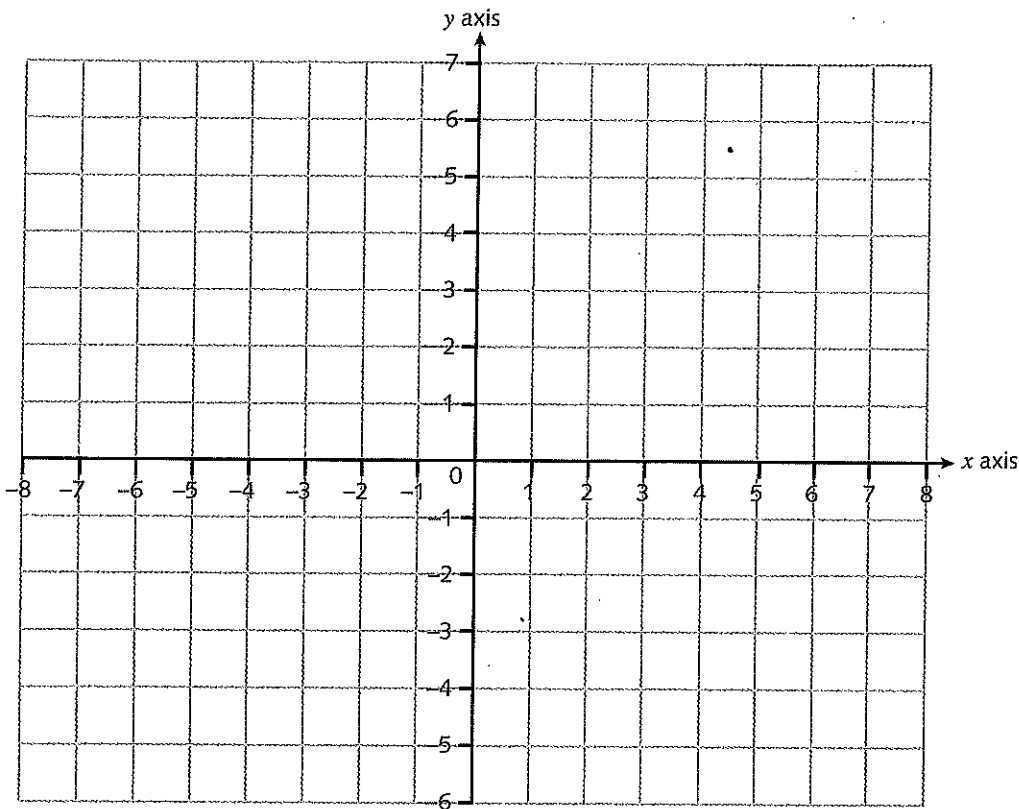
# Plotting Points

## Challenge 3

1 a) Plot these points on the grid and join them with a straight line.

A(-4,-2)

B(8,4)



b) Point Z is the midpoint of the line AB. Plot point Z.

c) What are the coordinates of point Z? \_\_\_\_\_

d) What are the  $x$  coordinates of every point on the  $y$  axis?  
\_\_\_\_\_



2 marks



1 mark



1 mark



1 mark

Marks..... /5

Total marks ..... /17

How am I doing?

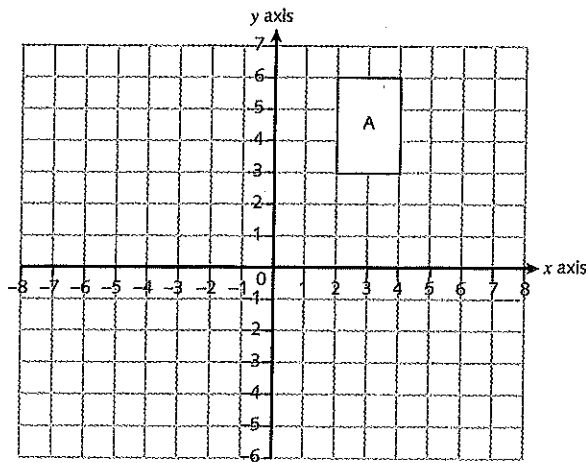


# Translation

PS Problem-solving questions

## Challenge 1

1



a) What are the coordinates of the vertices of shape A?

\_\_\_\_\_

b) Translate shape A 5 squares left to become shape A'.

c) Give the coordinates of A'. \_\_\_\_\_



4 marks



4 marks

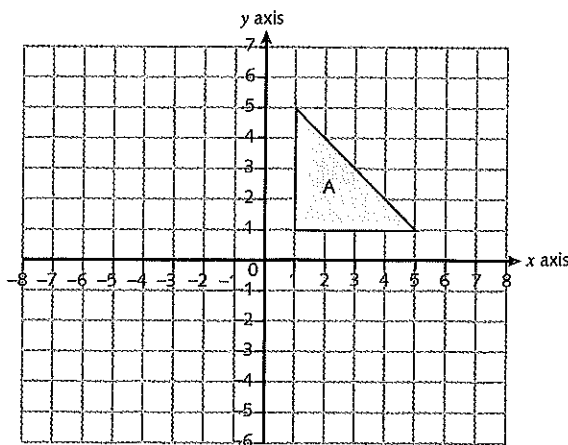


4 marks

Marks...../12

## Challenge 2

1



a) What are the coordinates of the vertices of shape A?

\_\_\_\_\_

b) Translate shape A 3 squares left and 5 squares down to become shape A'.

c) Give the coordinates of A'. \_\_\_\_\_



3 marks



3 marks



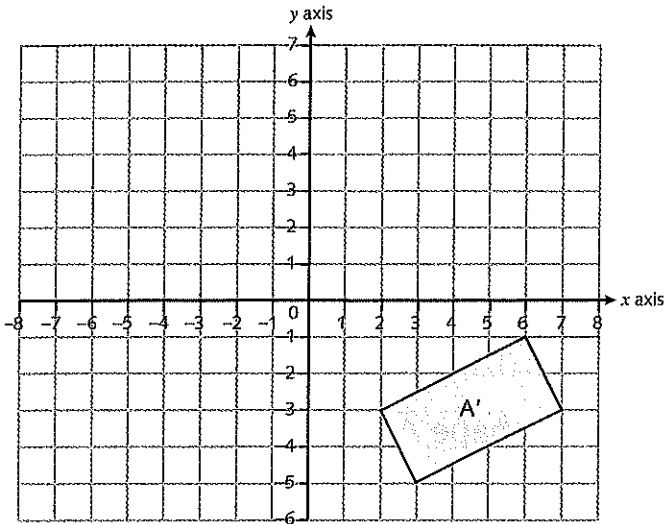
3 marks

Marks...../9

# Translation

## Challenge 3

1



a) Give the coordinates of the vertices of shape A'.

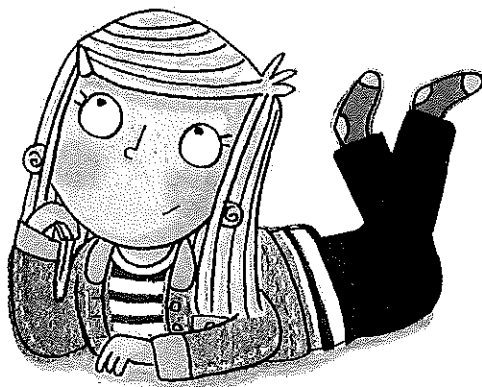
\_\_\_\_\_

b) Shape A' is the result of the translation of shape A. Shape A was translated 10 squares right and 5 squares down to produce shape A'.

Draw shape A on the grid.

c) Give the coordinates of shape A.

\_\_\_\_\_



4 marks



4 marks



4 marks

Marks...../12

Total marks ..... /33

How am I doing?



# Reflection

PS Problem-solving questions

## Challenge 1

1 a) Give the coordinates of shape A.

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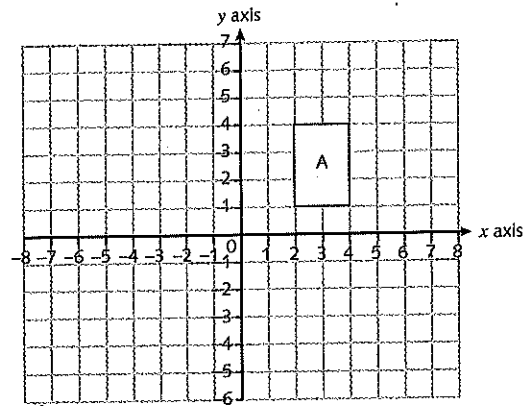
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b) Reflect shape A in the  $y$  axis to give shape A'. Draw shape A'.

c) Give the coordinates for shape A'.

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4 marks



4 marks



1 mark

Marks..... /9

## Challenge 2

1 a) Give the coordinates of shape A.

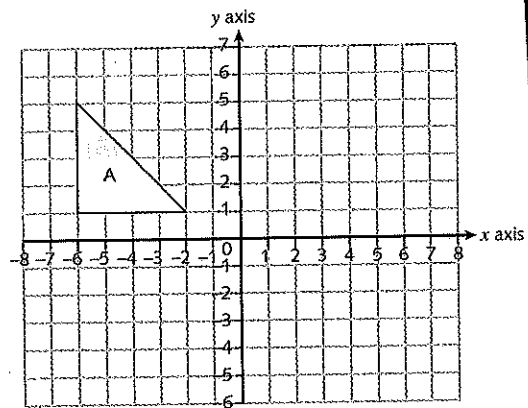
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b) Reflect shape A in the  $x$  axis to give shape A'. Draw shape A'.

c) Give the coordinates for shape A'.

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d) What do you notice about the  $x$  coordinates of both shapes?

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3 marks



3 marks



3 marks



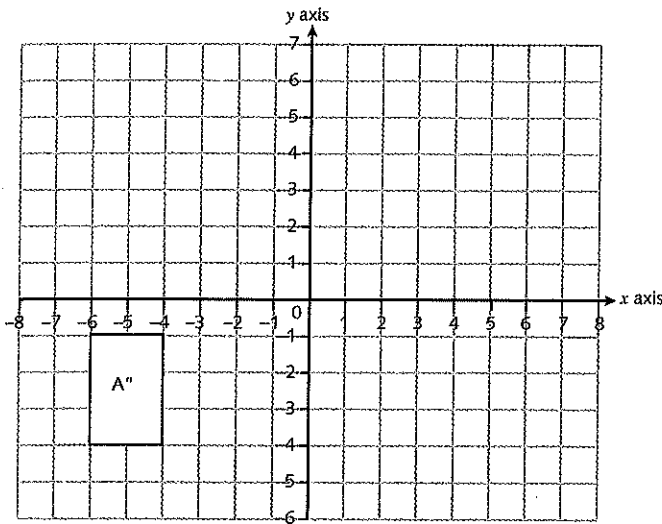
1 mark

Marks..... /10

# Reflection

## Challenge 3

- 1 Shape A was reflected in the  $x$  axis to give shape A'.  
Shape A' was then reflected in the  $y$  axis to produce shape A''.



- a) Plot and draw shapes A and A'.  
b) Give the coordinates for shapes A and A'.

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2 marks



8 marks



Marks..... /10

Total marks ..... /29

How am I doing?

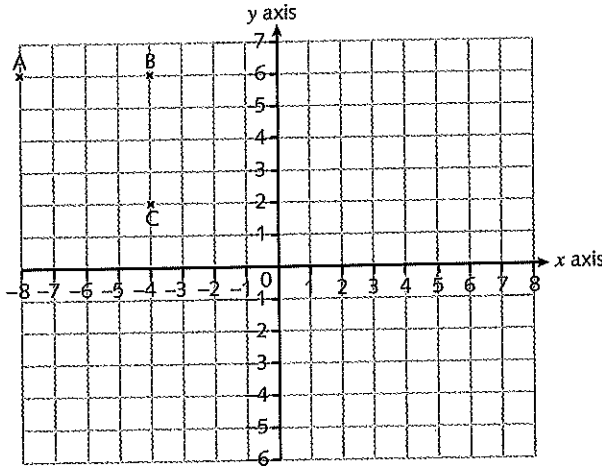


# Missing Coordinates

PS Problem-solving questions

## Challenge 1

- 1 a) Shape ABCD is a square. Plot point D and draw straight lines to complete the shape.



- b) Give the coordinates for point D. \_\_\_\_\_
- c) What are the coordinates of the point half way between A and B?  
\_\_\_\_\_



2 marks



1 mark

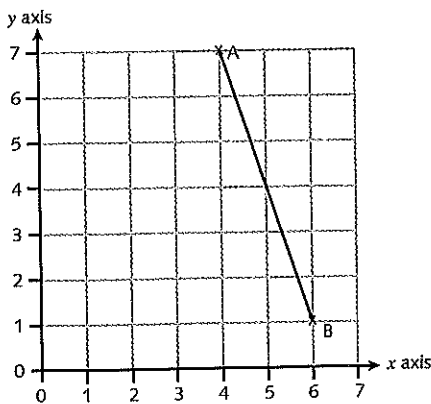


1 mark

Marks..... /4

## Challenge 2

- PS 1 a) Shape ABC is an isosceles triangle with BC being the shortest side. Plot point C and draw straight lines to complete the shape.



- b) Give the coordinates for point C. \_\_\_\_\_
- c) What are the coordinates of the point half way between B and C?  
\_\_\_\_\_



2 marks



1 mark



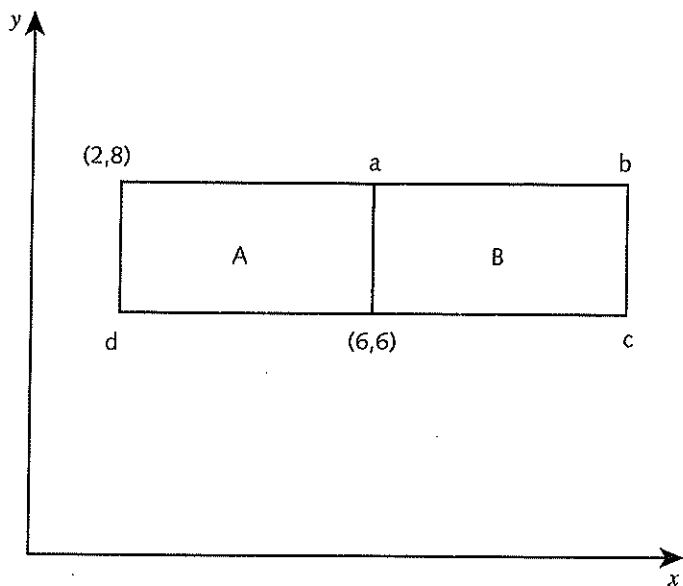
1 mark

Marks..... /4

# Missing Coordinates

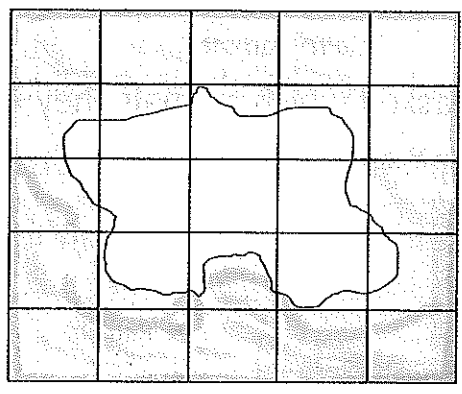
## Challenge 3

1 Shapes A and B are identical rectangles where the length of each rectangle is double the width of the rectangle (ab is double the length of bc).



Give the coordinates of points a, b, c and d.

- a) a = \_\_\_\_\_
- b) b = \_\_\_\_\_
- c) c = \_\_\_\_\_
- d) d = \_\_\_\_\_



Marks..... /4

Total marks ..... /12

How am I doing?

