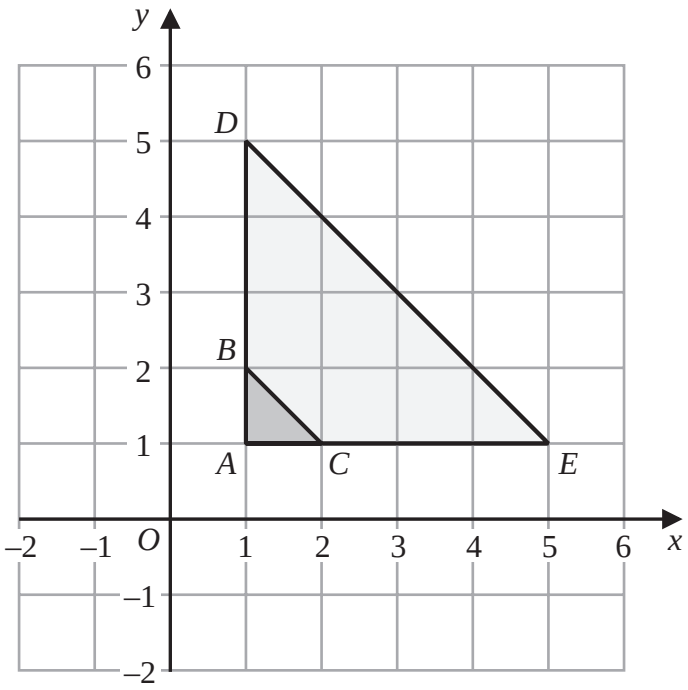
1 Here is a diagram showing triangle *ABC* and triangle *ADE*.



Describe fully the single transformation that maps triangle *ABC* onto triangle *ADE*.

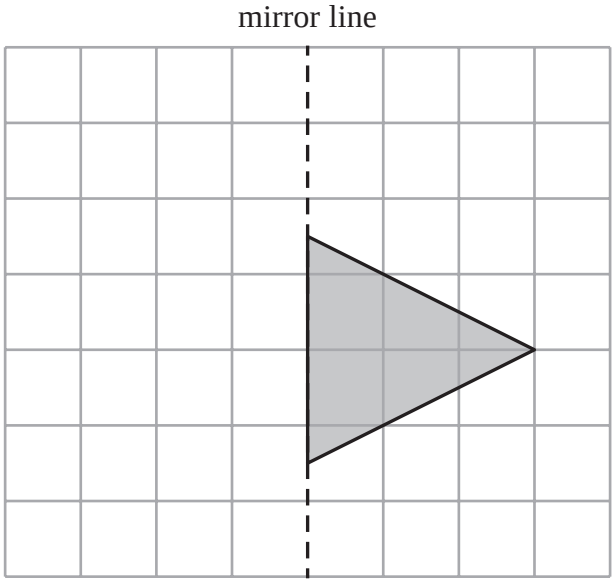
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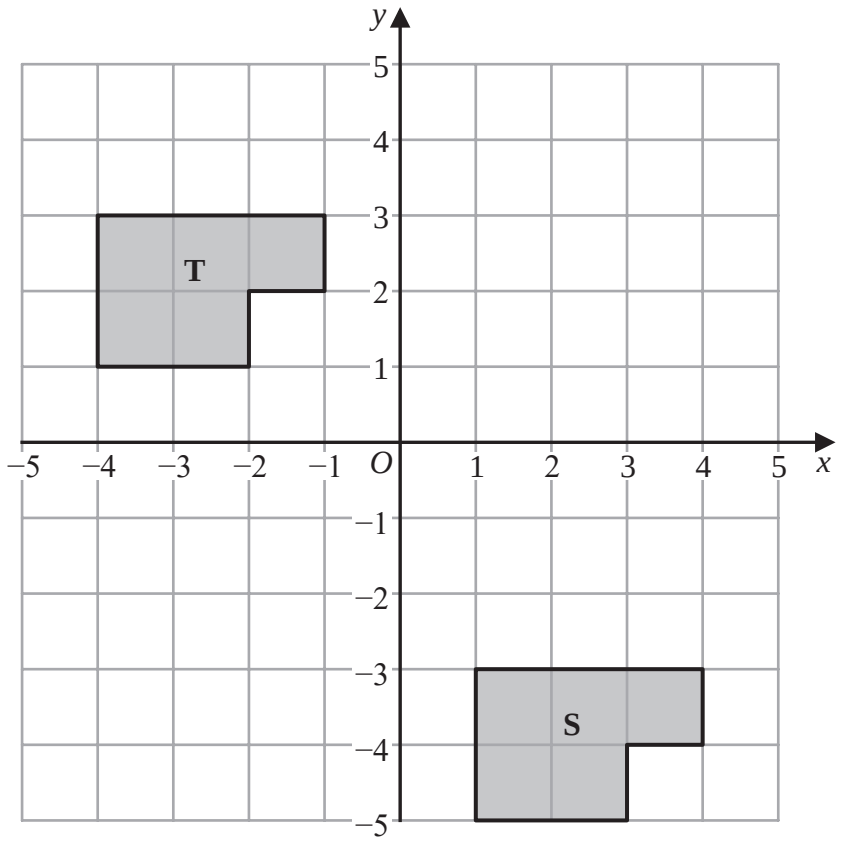
(Total for Question 1 is 2 marks)

2 On the grid, reflect the shaded triangle in the mirror line.



(Total for Question 2 is 1 mark)

3



Describe fully the single transformation that maps shape **S** onto shape **T**.

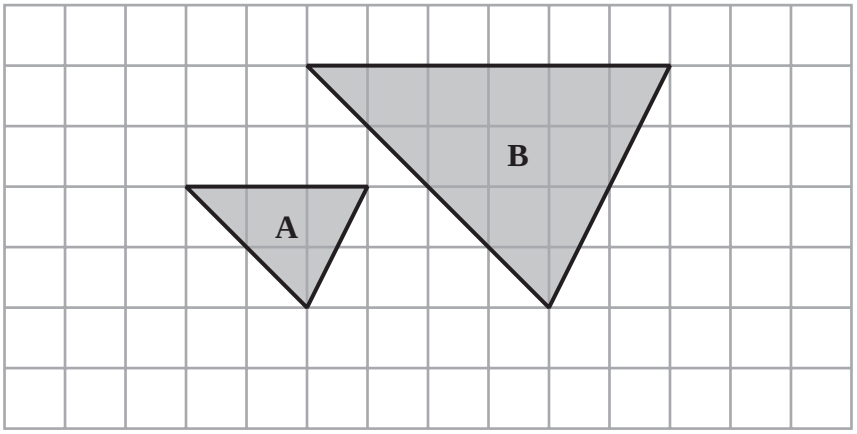
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(Total for Question 3 is 2 marks)

4 Here are two triangles on a grid.



Triangle **B** is an enlargement of triangle **A**.

(a) (i) Write down the scale factor of the enlargement.

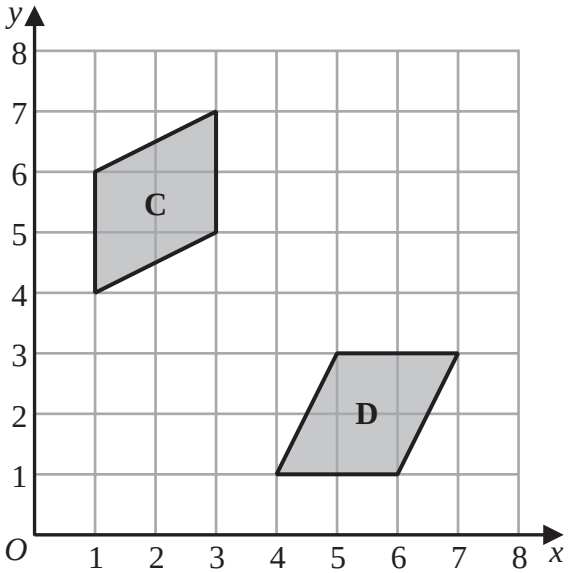
.....

(1)

(ii) On the grid, mark with a cross (×) the centre of enlargement.

(1)

Here are two parallelograms on a coordinate grid.



Parallelogram **D** is a reflection of parallelogram **C**.

(b) (i) On the grid, draw the mirror line.

(1)

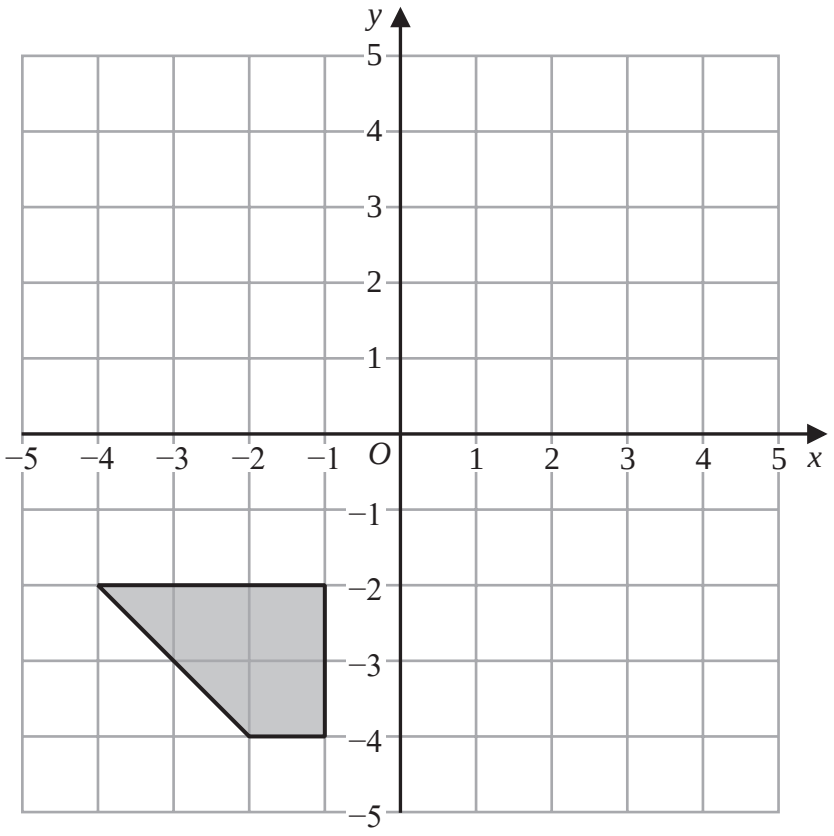
(ii) Write down an equation of this mirror line.

.....

(1)

(Total for Question 4 is 4 marks)

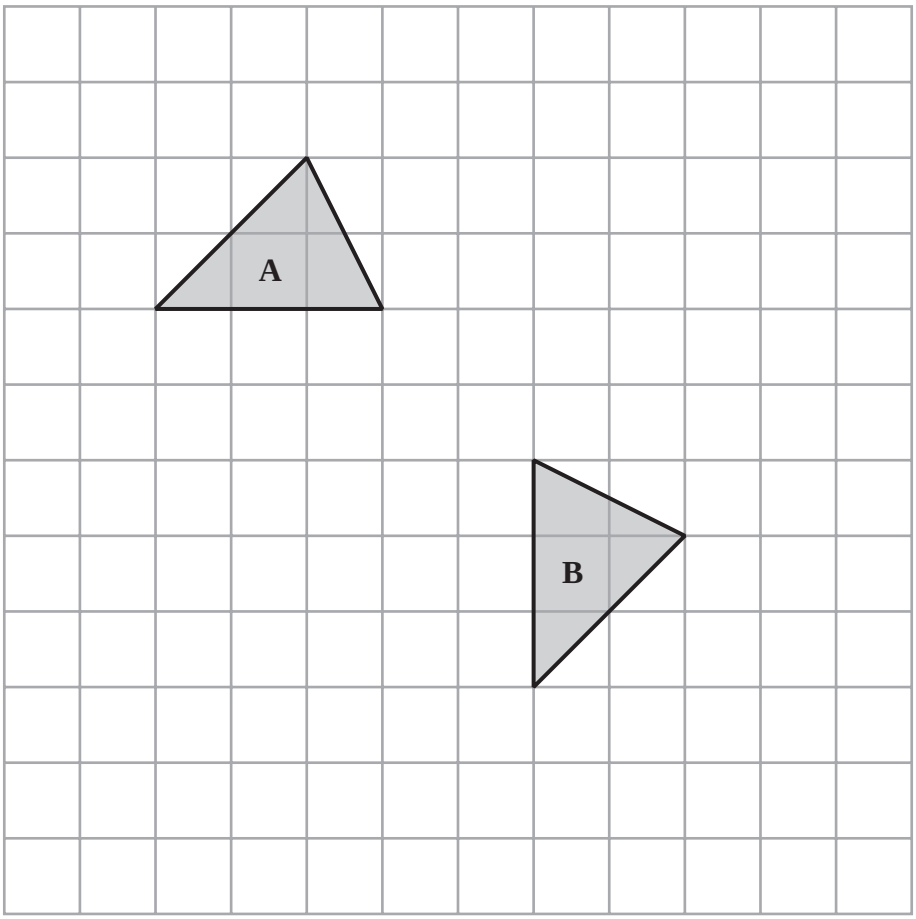
5



Rotate the shaded shape 90° anticlockwise about (0,0)

(Total for Question 5 is 2 marks)

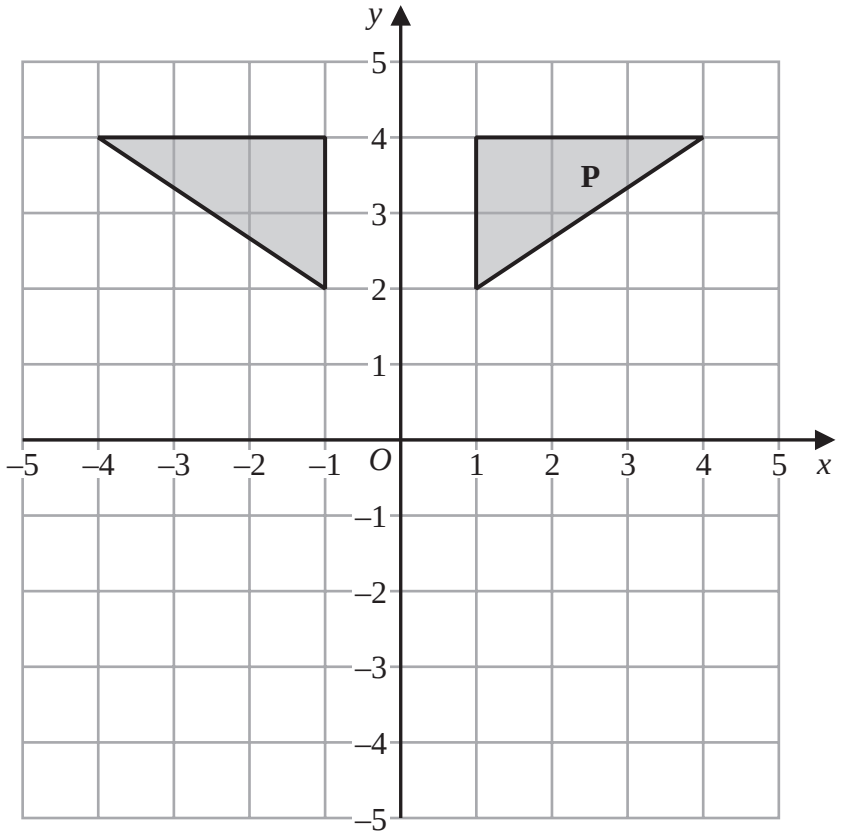
6 Shape **A** is reflected in a mirror line to give shape **B**.



(a) On the grid, draw the mirror line.

(1)

(b) Alex is asked to reflect shape **P** in the *x*-axis.
Here is the diagram Alex draws.



Explain the mistake Alex has made.

.....

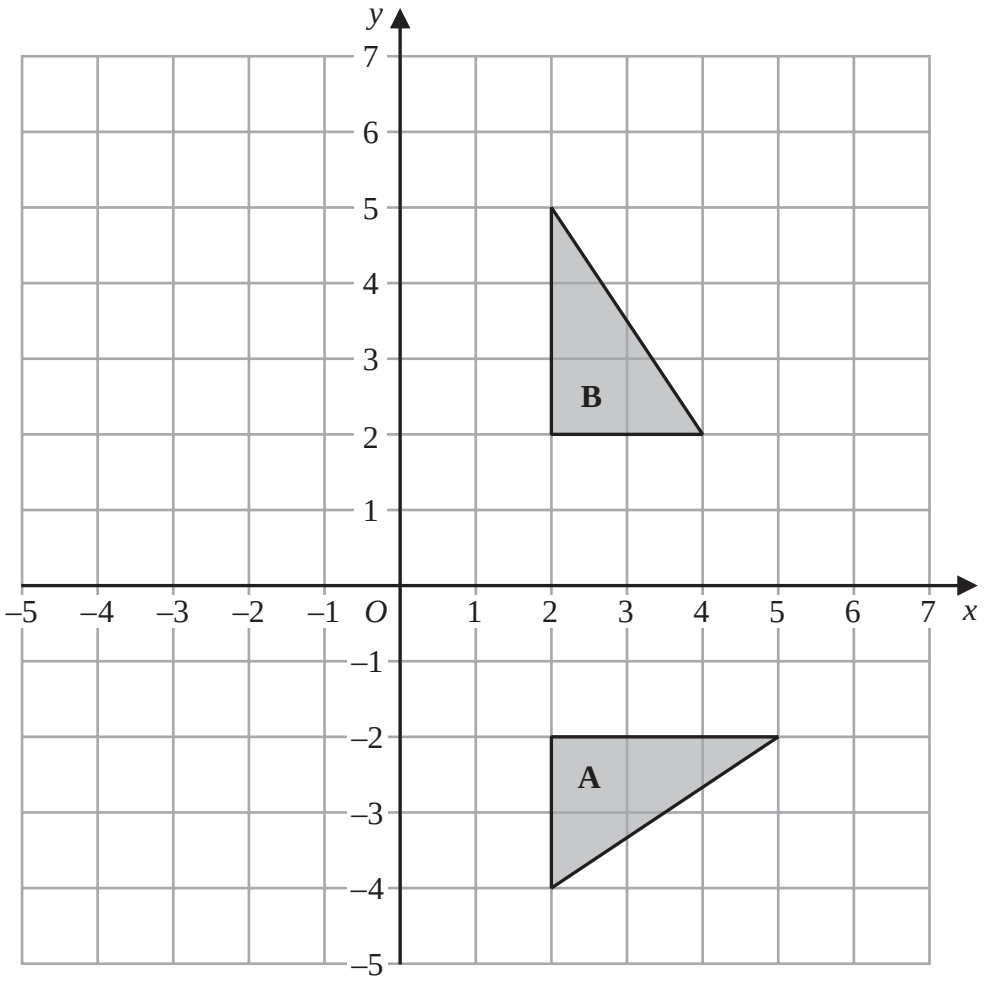
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(1)

(Total for Question 6 is 2 marks)

7



Describe fully the single transformation that maps shape **A** onto shape **B**.

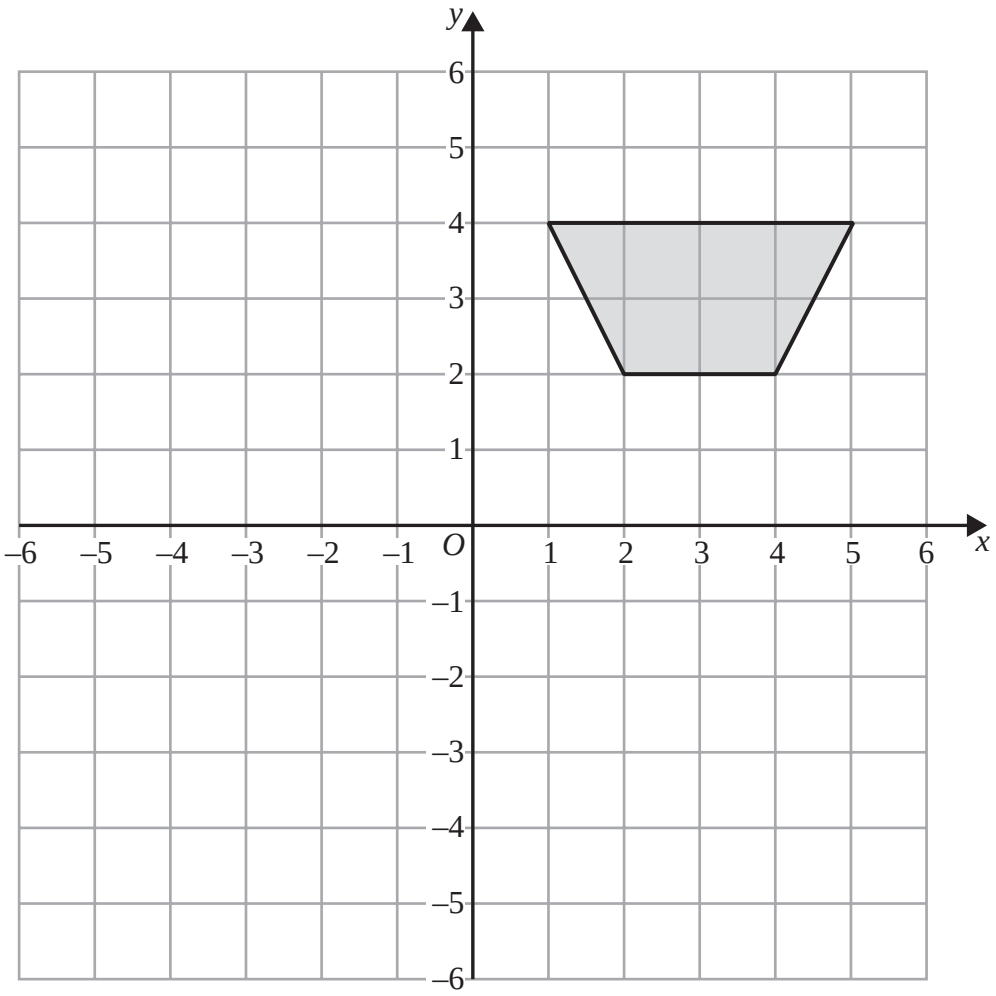
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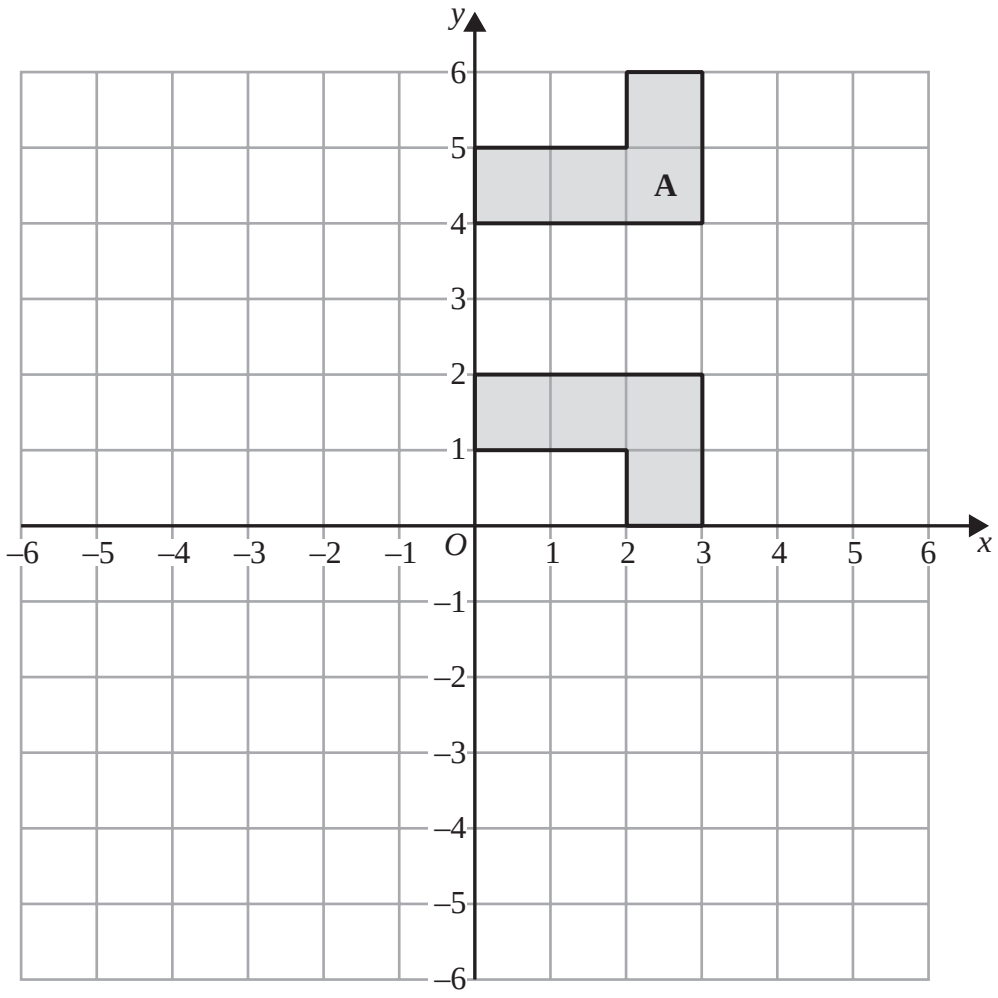
(Total for Question 7 is 2 marks)

8



(a) On the grid above, rotate the shaded shape 180° about (0, 0)

(2)



Mike was asked to

‘Reflect shape **A** in the line with equation $x = 3$’

Mike’s answer is shown on the grid.
His answer is wrong.

(b) Explain why.

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(1)

(Total for Question 8 is 3 marks)