

# Transformations- Mixed- Transformations

## Question Paper

Level	GCSE
Subject	Maths
Exam Board	Edexcel GCSE
Topic	Transformations- Mixed-Transformations
Grade Level	Grade 3
Booklet	Question Paper

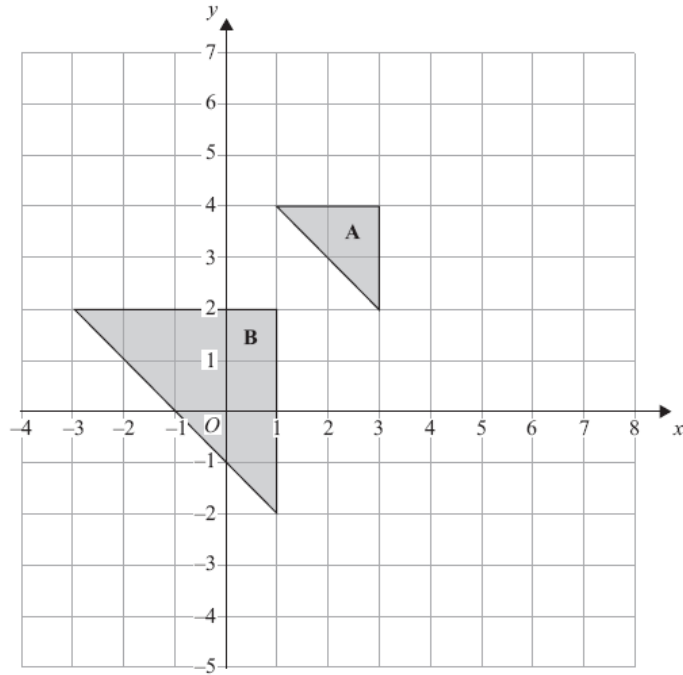
**Time Allowed:** 35 minutes

**Score:** /29

**Percentage:** /100

**Grade Boundaries:**

1.

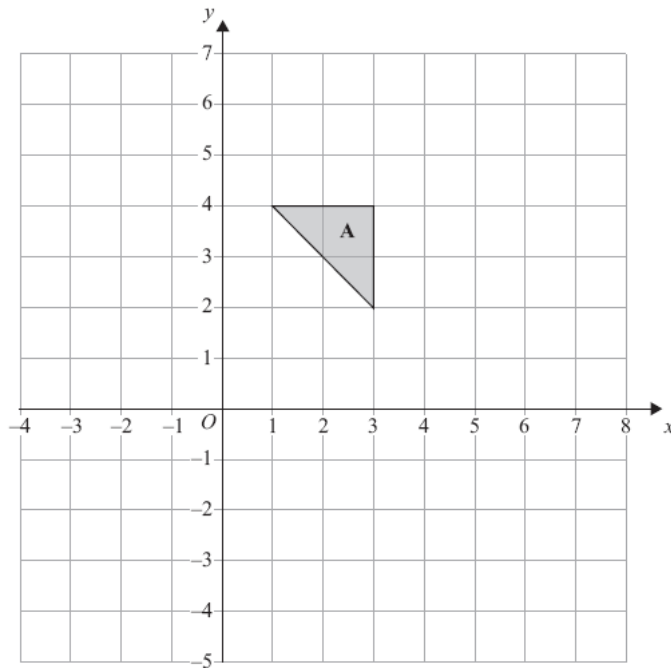


Triangle **A** and triangle **B** are drawn on the grid.

(a) Describe fully the single transformation which maps triangle **A** onto triangle **B**.

.....  
.....

(3)

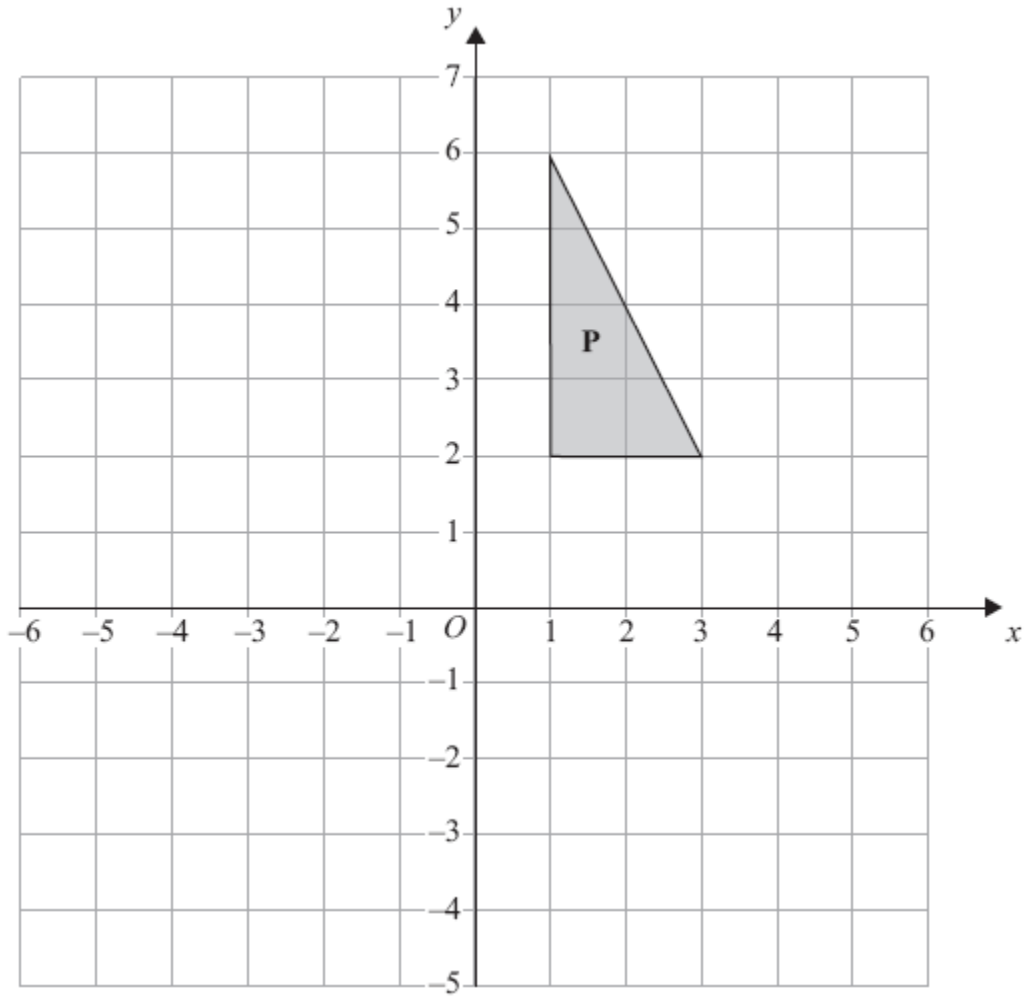


(b) Reflect triangle **A** in the line  $x = 4$

(2)

**(5 marks)**

2.



Triangle **P** is drawn on a coordinate grid.

The triangle **P** is reflected in the line  $x = -1$  and then reflected in the line  $y = 1$  to give triangle **Q**.

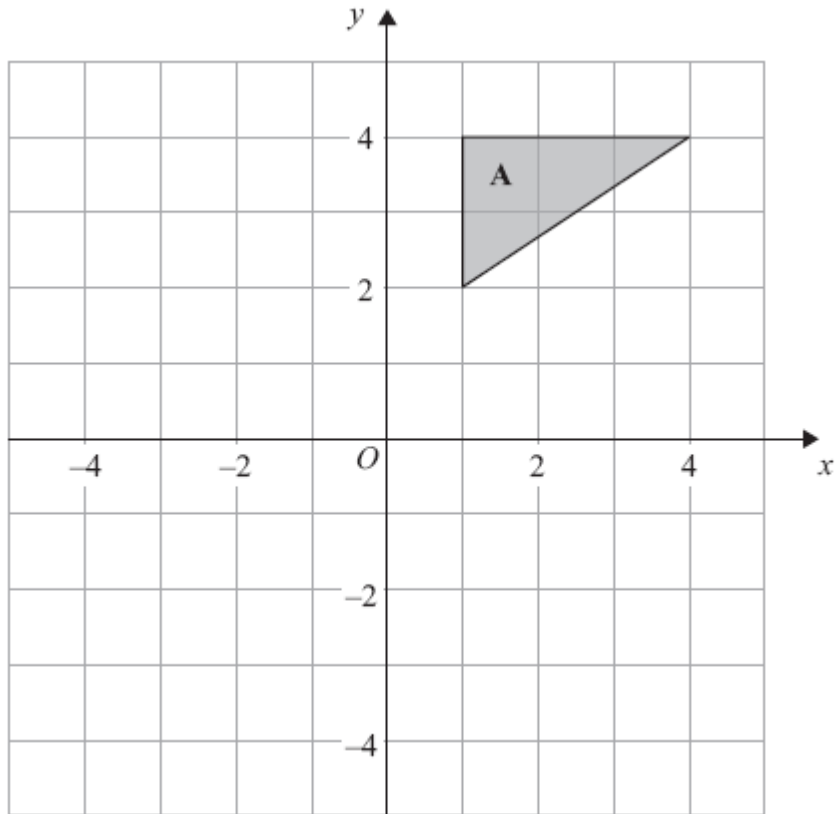
Describe fully the single transformation which maps triangle **P** onto triangle **Q**.

.....  
.....

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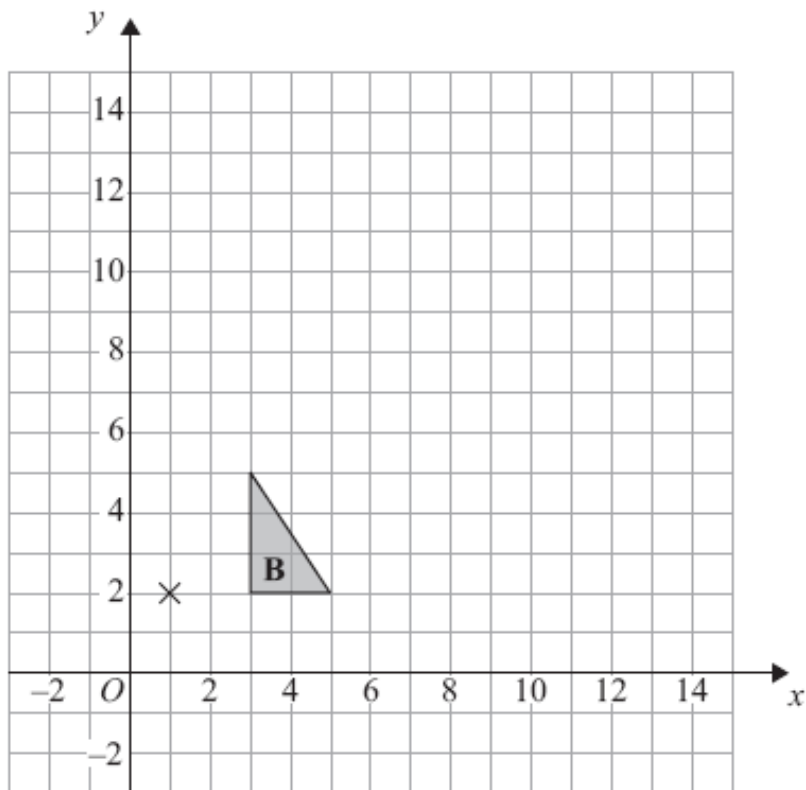
**(3 marks)**

3.



(a) Rotate triangle A  $90^\circ$  clockwise, centre  $O$ .

(2)

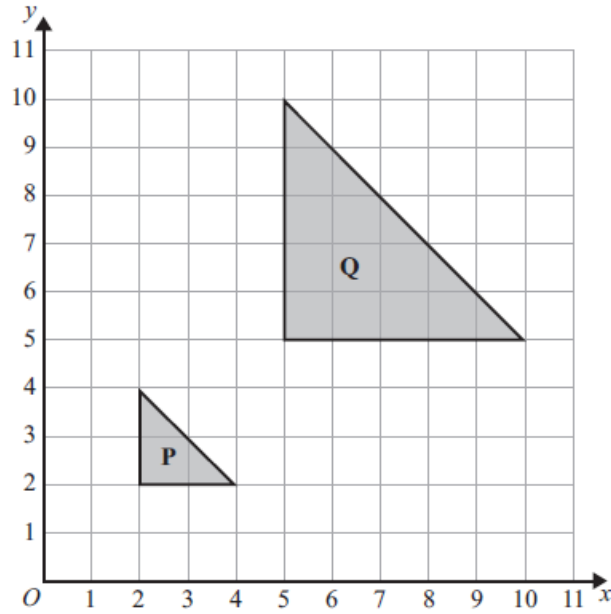


(b) Enlarge triangle B by scale factor 3, centre (1, 2).

(3)

**(5 marks)**

4.



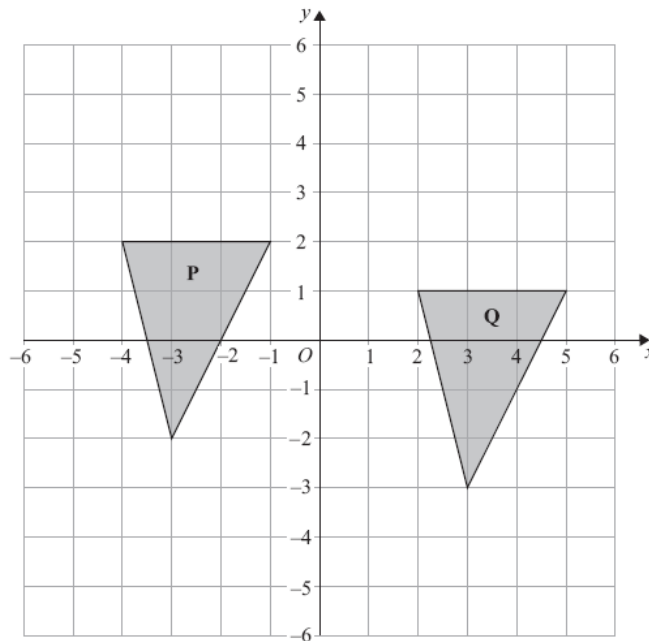
Describe fully the single transformation that maps shape **P** onto shape **Q**.

.....

.....

**(3 marks)**

5.



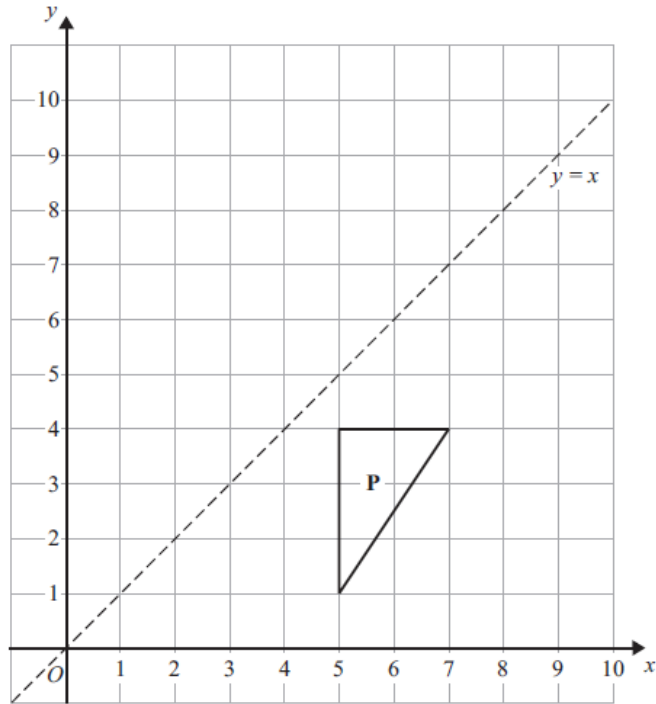
Describe fully the single transformation that maps triangle **P** onto triangle **Q**.

.....

.....

**(3 marks)**

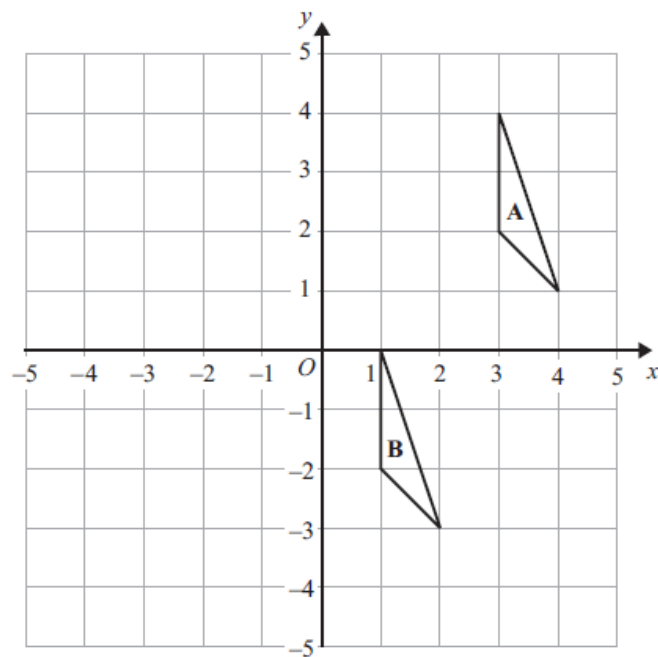
6. (a)



Reflect shape **P** in the line  $y = x$

(2)

(b)



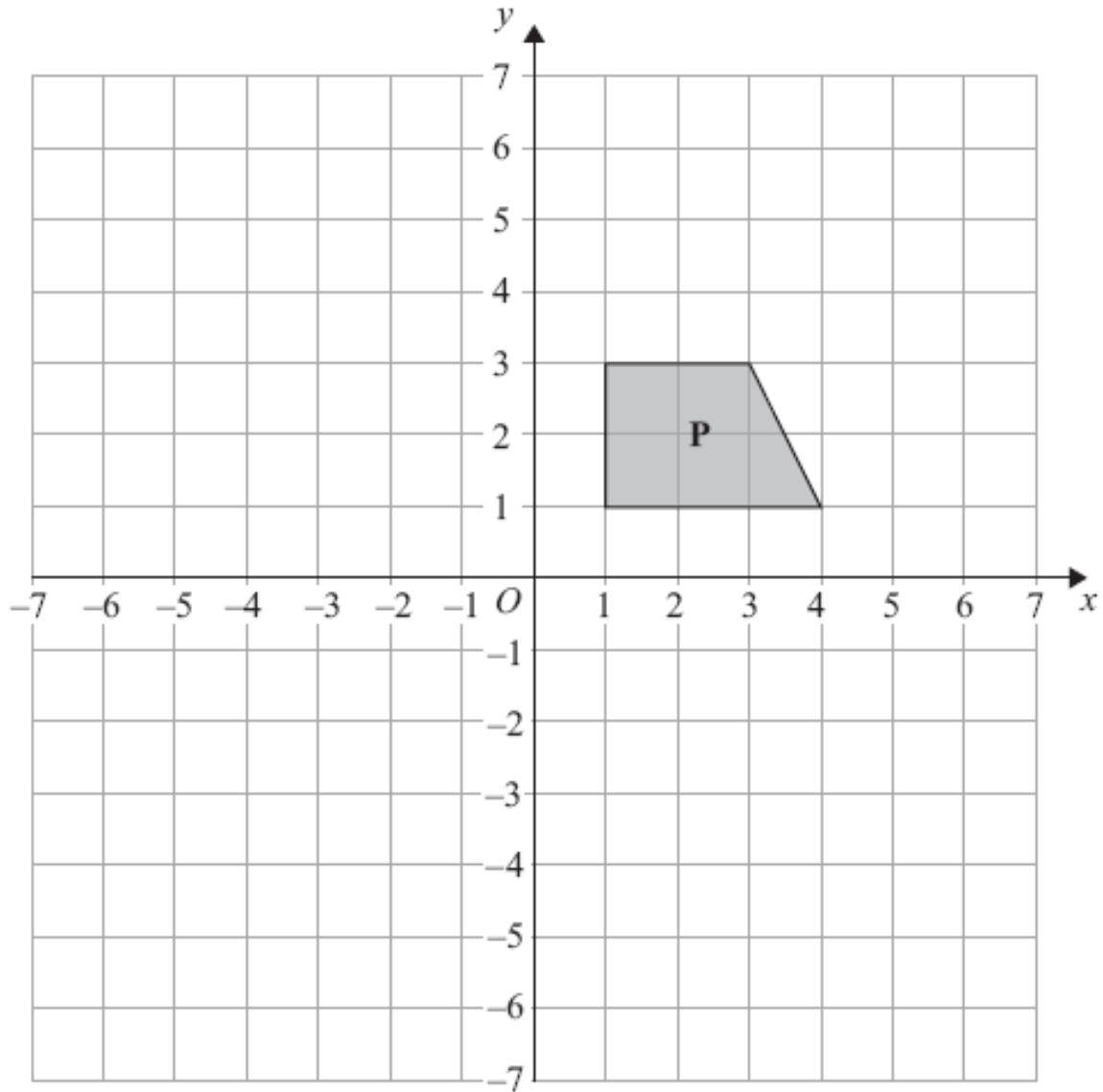
Describe fully the single transformation that maps triangle **A** onto triangle **B**.

.....  
.....

(2)

(4 marks)

7.



Shape **P** is reflected in the line  $x = -1$  to give shape **Q**.

Shape **Q** is reflected in the line  $y = 0$  to give shape **R**.

Describe fully the **single** transformation that maps shape **P** onto shape **R**.

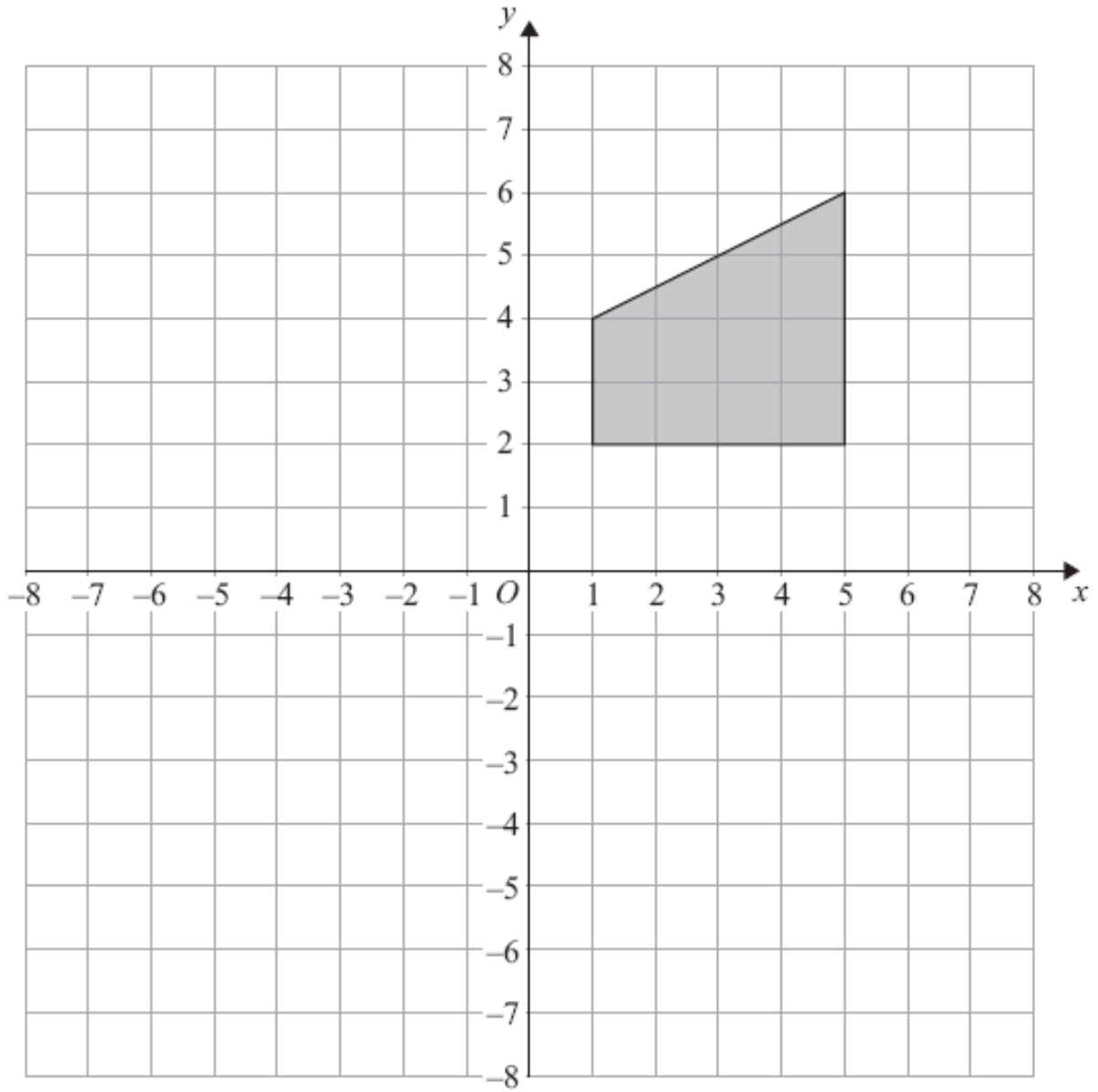
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**(3 marks)**

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8.



Rotate the shaded shape  $90^\circ$  clockwise about the point (1, -1).

**(3 marks)**

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