Name: SOLUTIONS

GCSE (1 - 9)

Reflections



Solutions by
Kenneth Stafford
MATHS TUTOR
ken@kennethstafford.co.uk

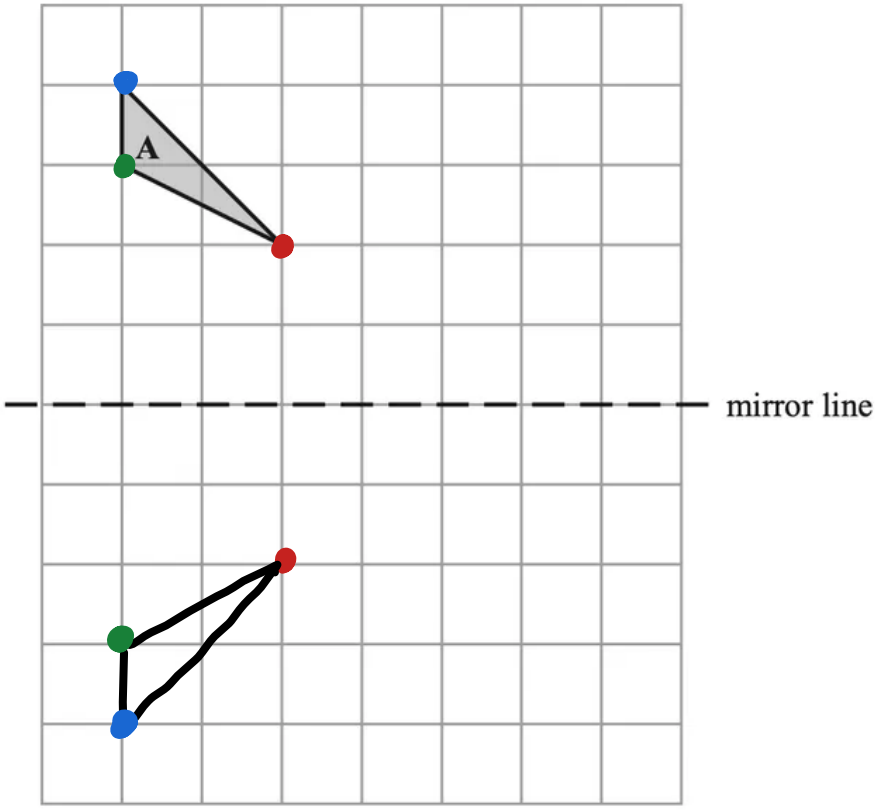
These questions are compiled from *released* Pearson Edexcel GCSE maths exam papers
They contain exam questions from up until the ***Summer 2023*** exam series
More recent exam papers do exist but are withheld for mock exams
As new exam papers are released these worksheets will gradually be updated
The ***most current*** version of these worksheets will always be available at: kennethstafford.co.uk

Question	Where the question appeared
1	Edexcel, GCSE, Autumn 2021, Paper 2F, Q11
2	Edexcel, GCSE, Autumn 2020, Paper 1F, Q11
3	Edexcel, GCSE, Autumn 2019, Paper 3F, Q18
4	Edexcel, GCSE, Summer 2019, Paper 1F, Q26
5	Edexcel, GCSE, Autumn 2018, Paper 2F, Q26
6	Edexcel, GCSE, Autumn 2018, Paper 3F, Q10
7	Edexcel, GCSE, Autumn 2017, Paper 3F, Q14
8	Edexcel, GCSE, Summer 2017, Paper 2F, Q13
9	Edexcel, GCSE, Summer 2023, Paper 2F, Q12
10	Edexcel, GCSE, November 2022, Paper 1F, Q11
11	Edexcel, GCSE, Summer 2022, Paper 1F, Q3

Reflections (Past Paper Questions)

1

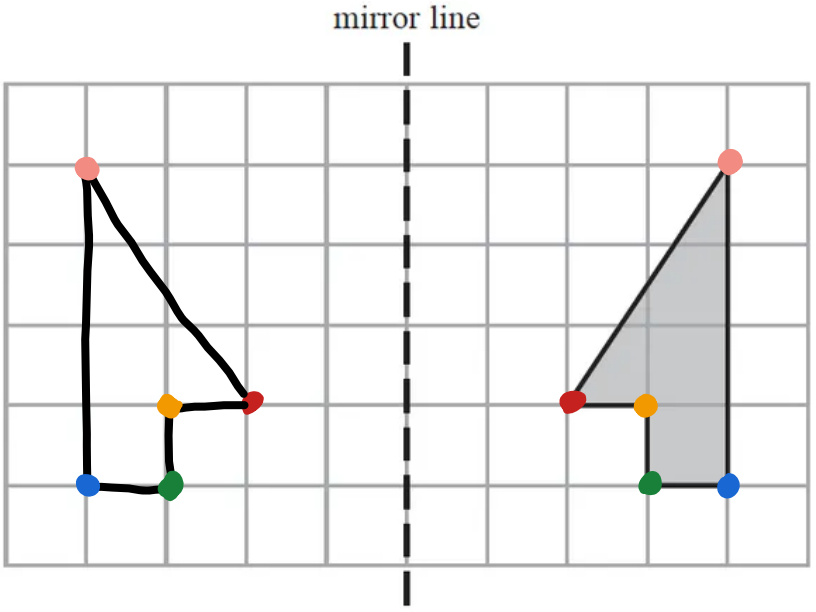
Reflect shape **A** in the mirror line.



(Total for Question 11 is 2 marks)

[Edexcel, GCSE, Autumn 2021, Paper 2F, Q11]

2

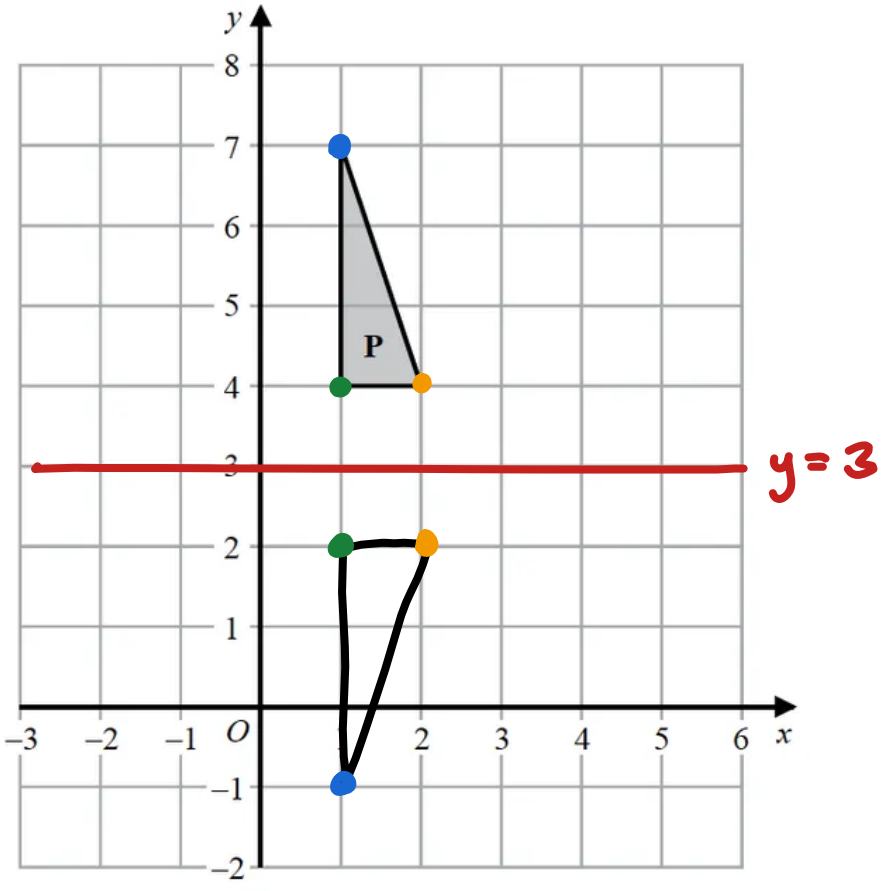


Reflect the shaded shape in the mirror line.

(Total for Question 11 is 2 marks)

[Edexcel, GCSE, Autumn 2020, Paper 1F, Q11]

3

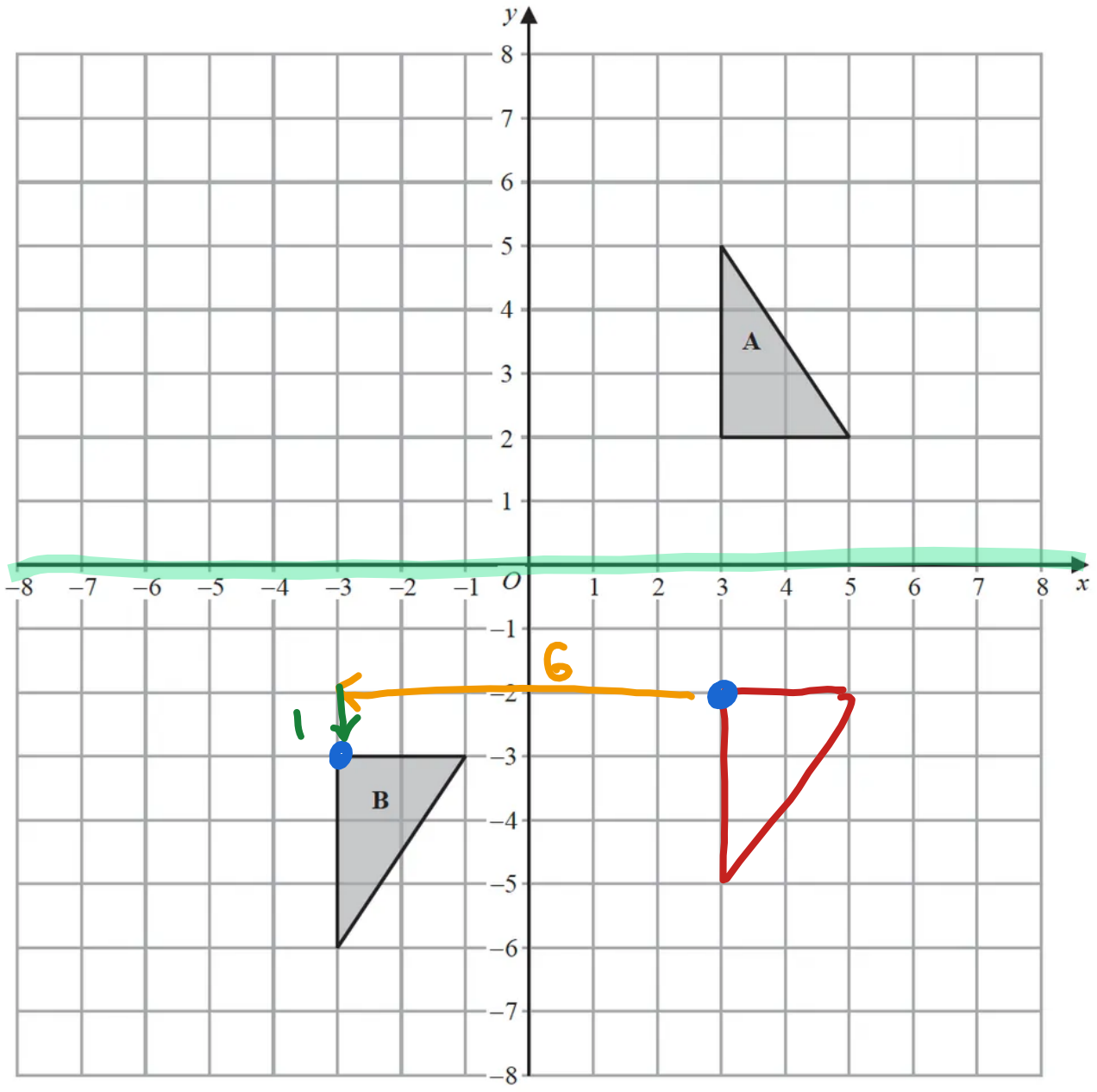


Reflect shape **P** in the line $y = 3$

(Total for Question 18 is 2 marks)

[Edexcel, GCSE, Autumn 2019, Paper 3F, Q18]

4



Shape **A** can be transformed to shape **B** by a reflection in the x-axis followed by a translation $\begin{pmatrix} c \\ d \end{pmatrix}$

Find the value of c and the value of d.

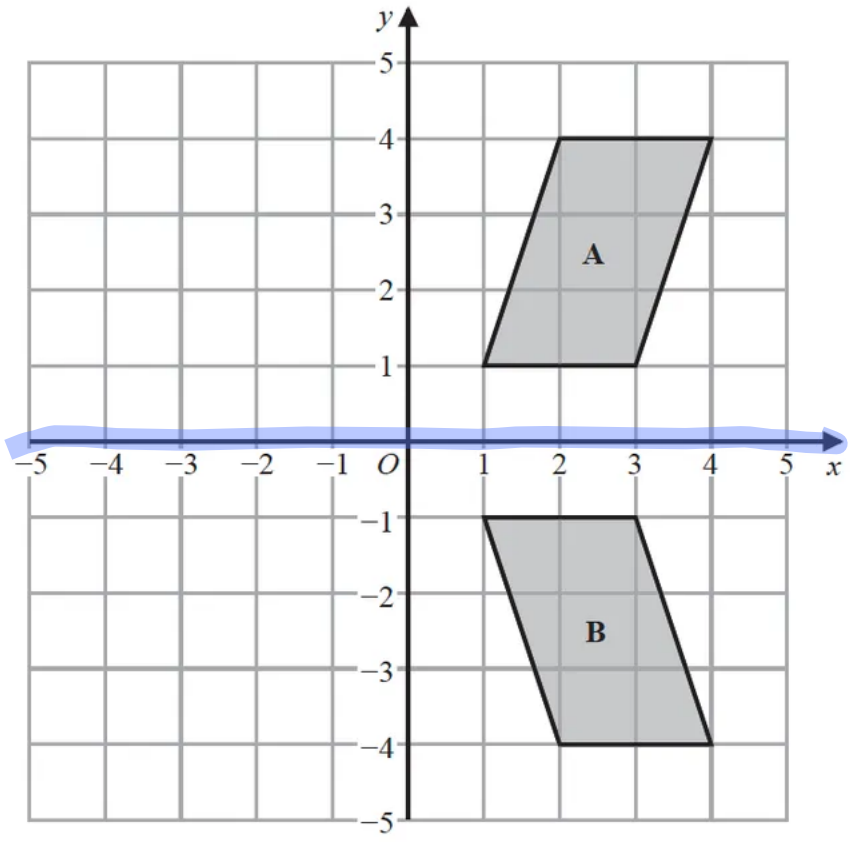
$c =$ ..... -6 .....

$d =$ ..... -1 .....

(Total for Question 26 is 3 marks)

[Edexcel, GCSE, Summer 2019, Paper 1F, Q26]

5



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

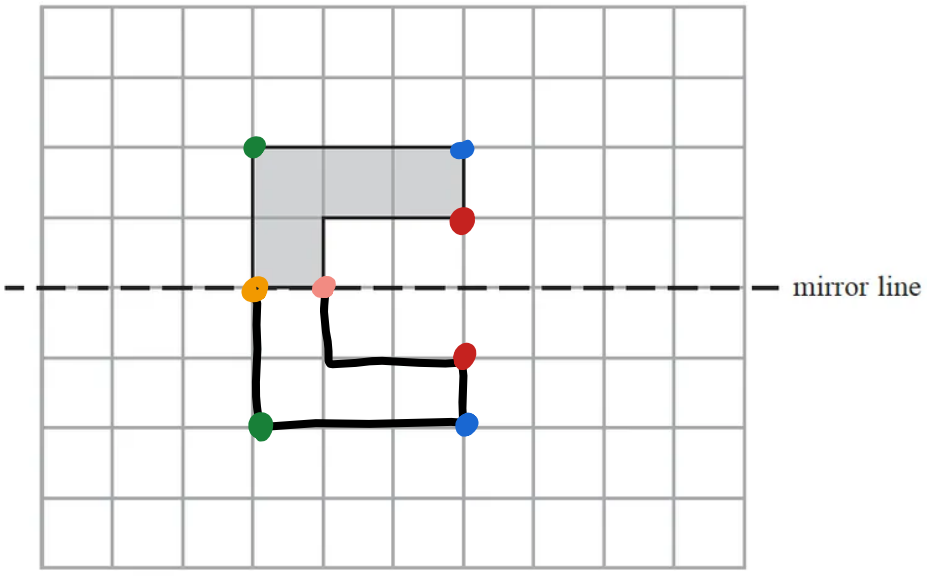
Reflection in the x axis

(Total for Question 16 is 2 marks)

[Edexcel, GCSE, Autumn 2018, Paper 2F, Q26]

6

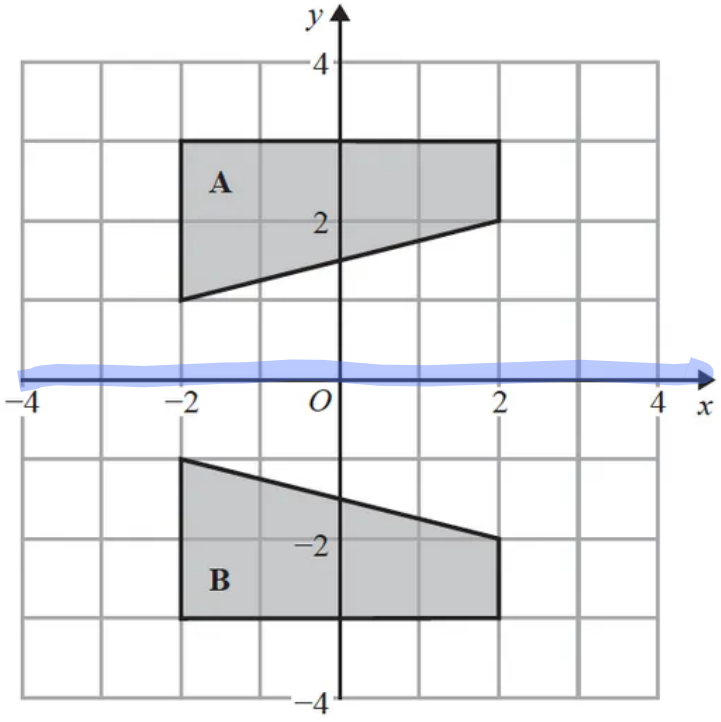
On the grid, reflect the shaded shape in the mirror line.



(Total for Question 10 is 1 mark)

[Edexcel, GCSE, Autumn 2018, Paper 3F, Q10]

7



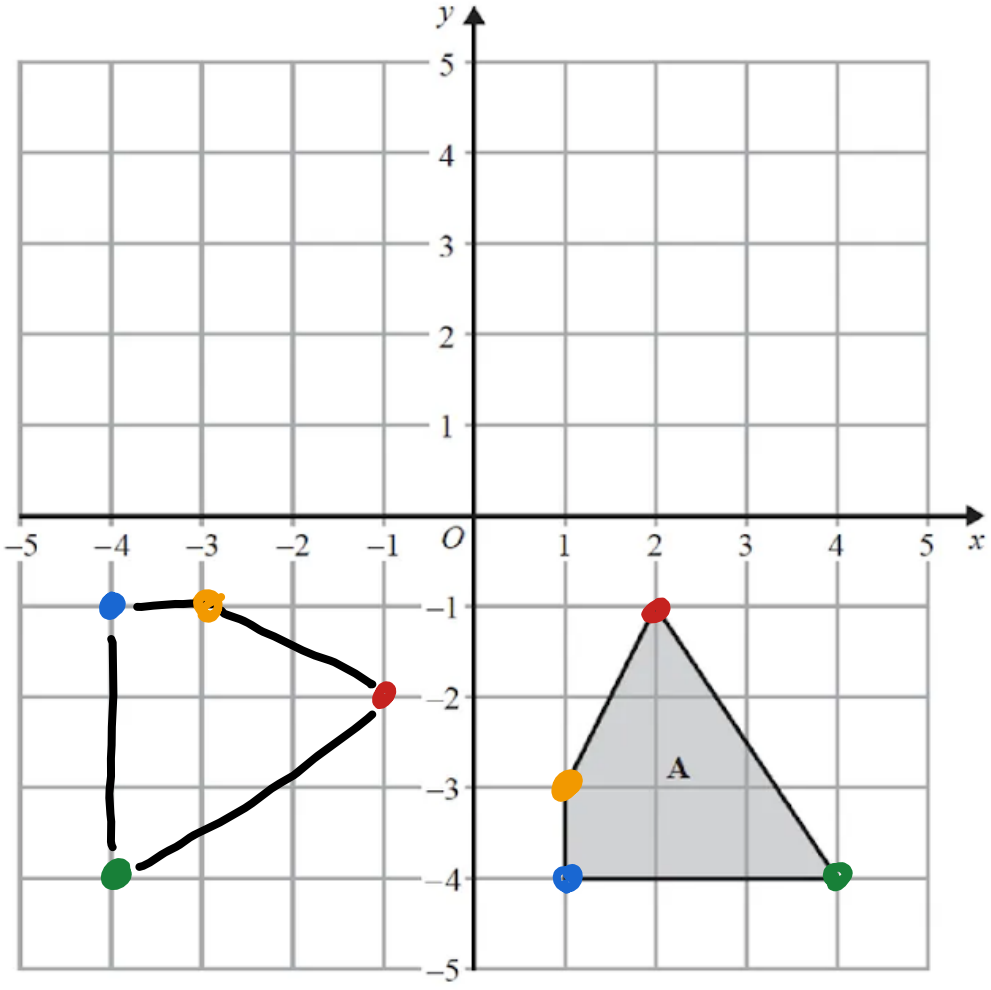
Describe fully the single transformation that maps shape **A** onto shape **B**.

Reflection in the x axis

(Total for Question 14 is 2 marks)

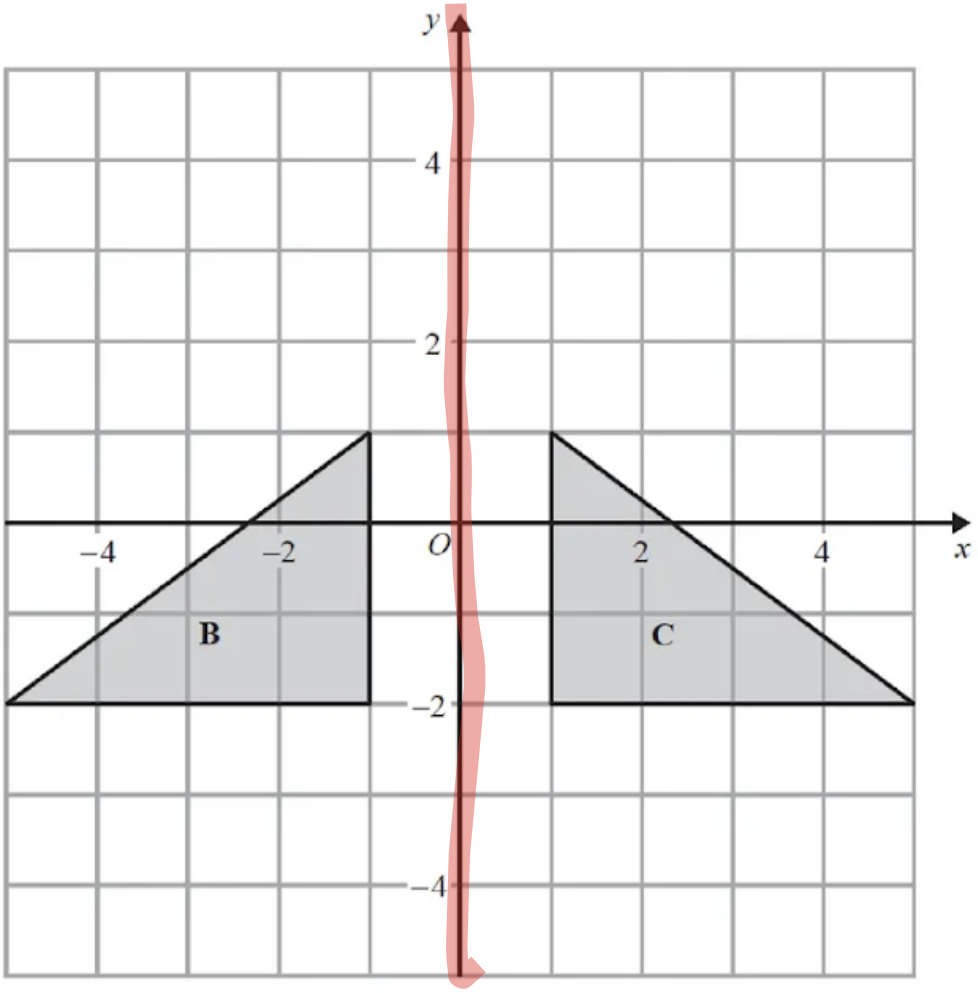
[Edexcel, GCSE, Autumn 2017, Paper 3F, Q14]

8



(a) Rotate shape **A** 90° clockwise about centre O.

(2)



(b) Describe fully the single transformation that maps triangle **B** onto triangle **C**.

Reflection in the y axis

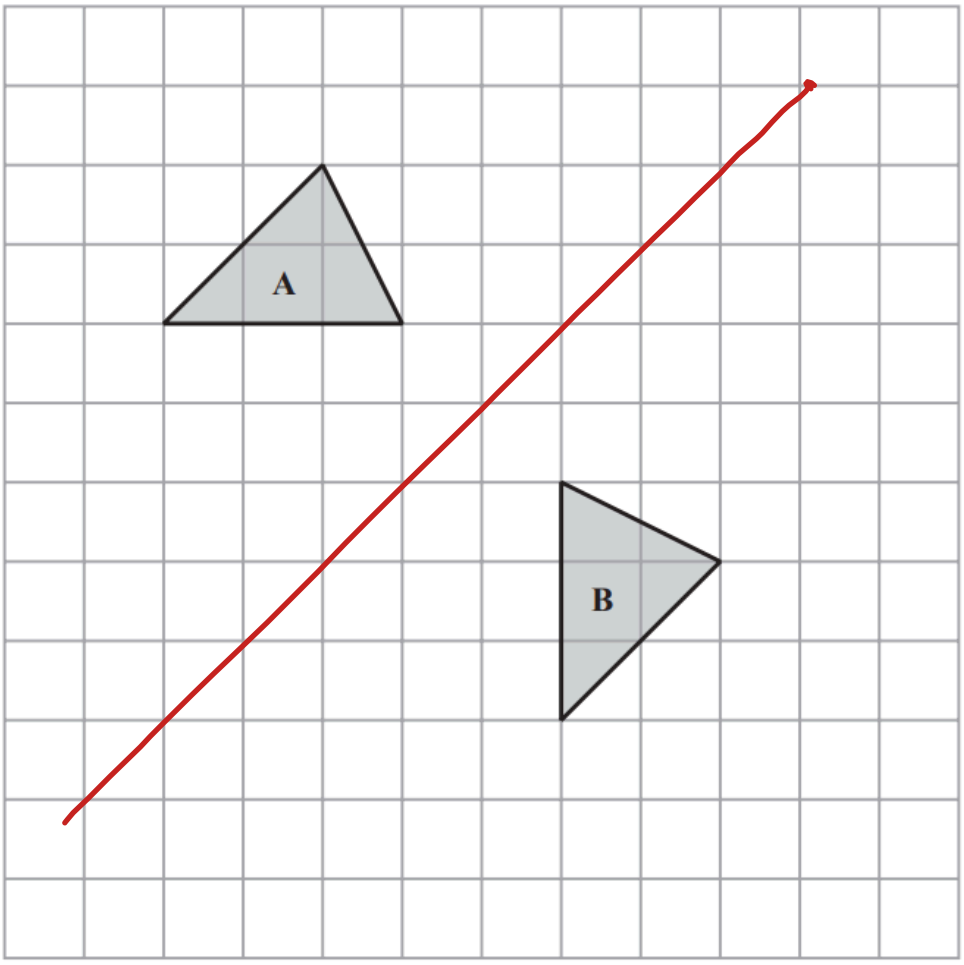
(2)

(Total for Question 13 is 4 marks)

[Edexcel, GCSE, Summer 2017, Paper 2F, Q13]

9

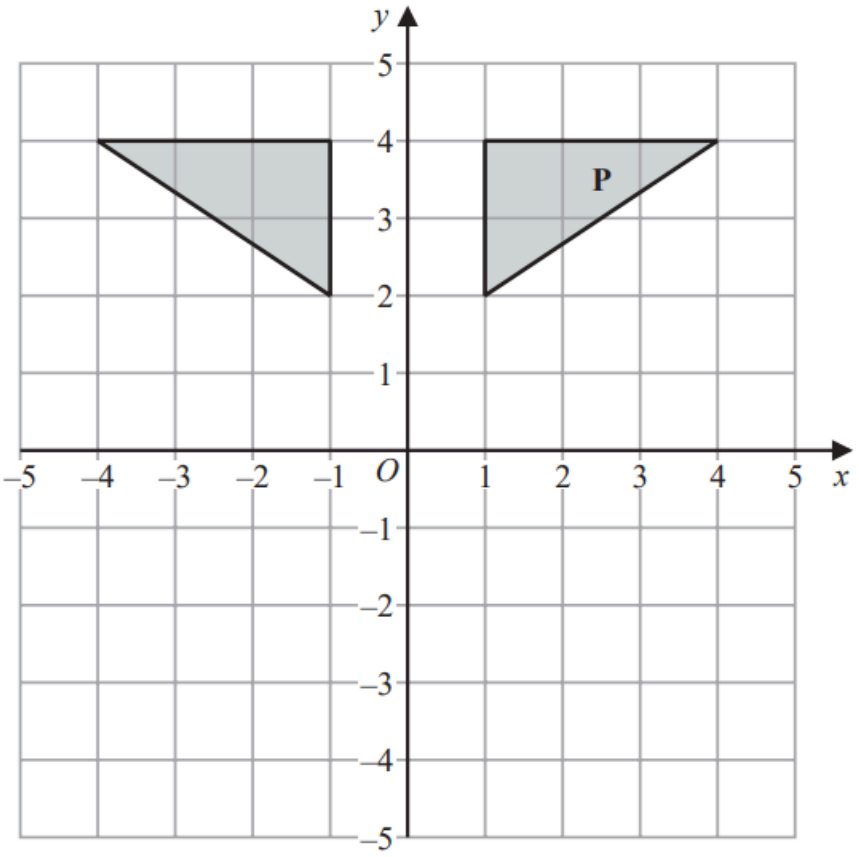
Shape **A** is reflected in a mirror line to give shape **B**.



(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.

He reflected in the y axis

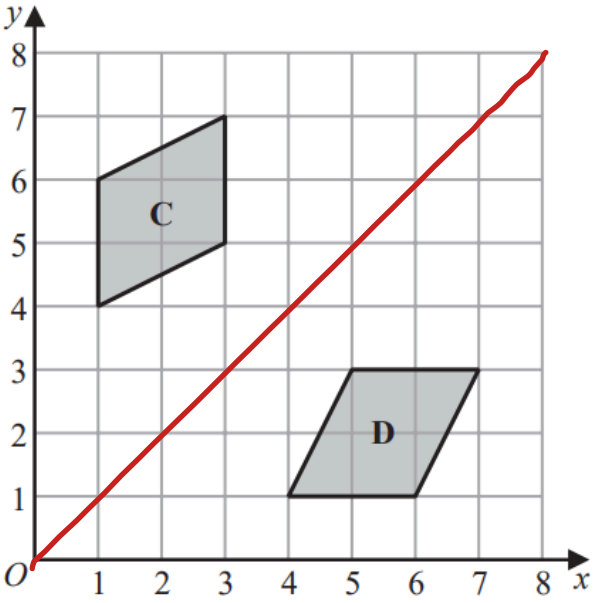
(1)

(Total for Question 12 is 2 marks)

[Edexcel, GCSE, Summer 2023, Paper 2F, Q12]

10

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.

$y = x$

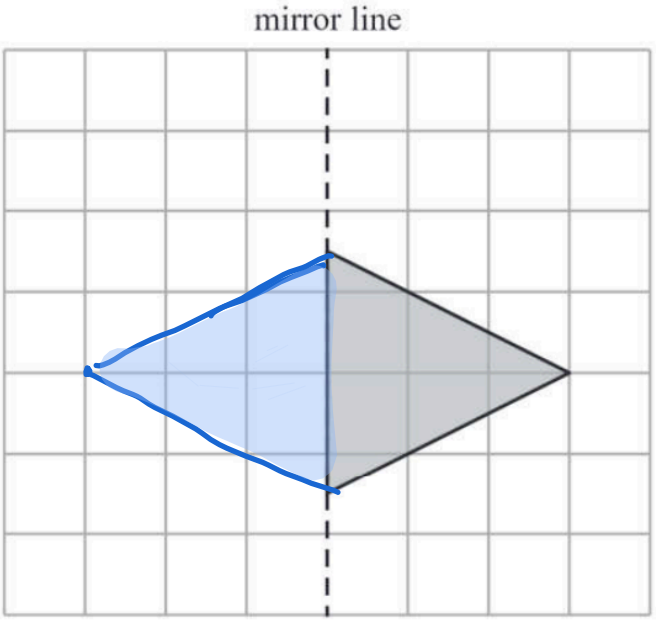
(1)

(Total for Question 11 is 4 marks)

[Edexcel, GCSE, November 2022, Paper 1F, Q11]

11

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



(Total for Question 3 is 1 mark)

[Edexcel, GCSE, Summer 2022, Paper 1F, Q3]