Name: SOLUTIONS

GCSE (1 - 9)

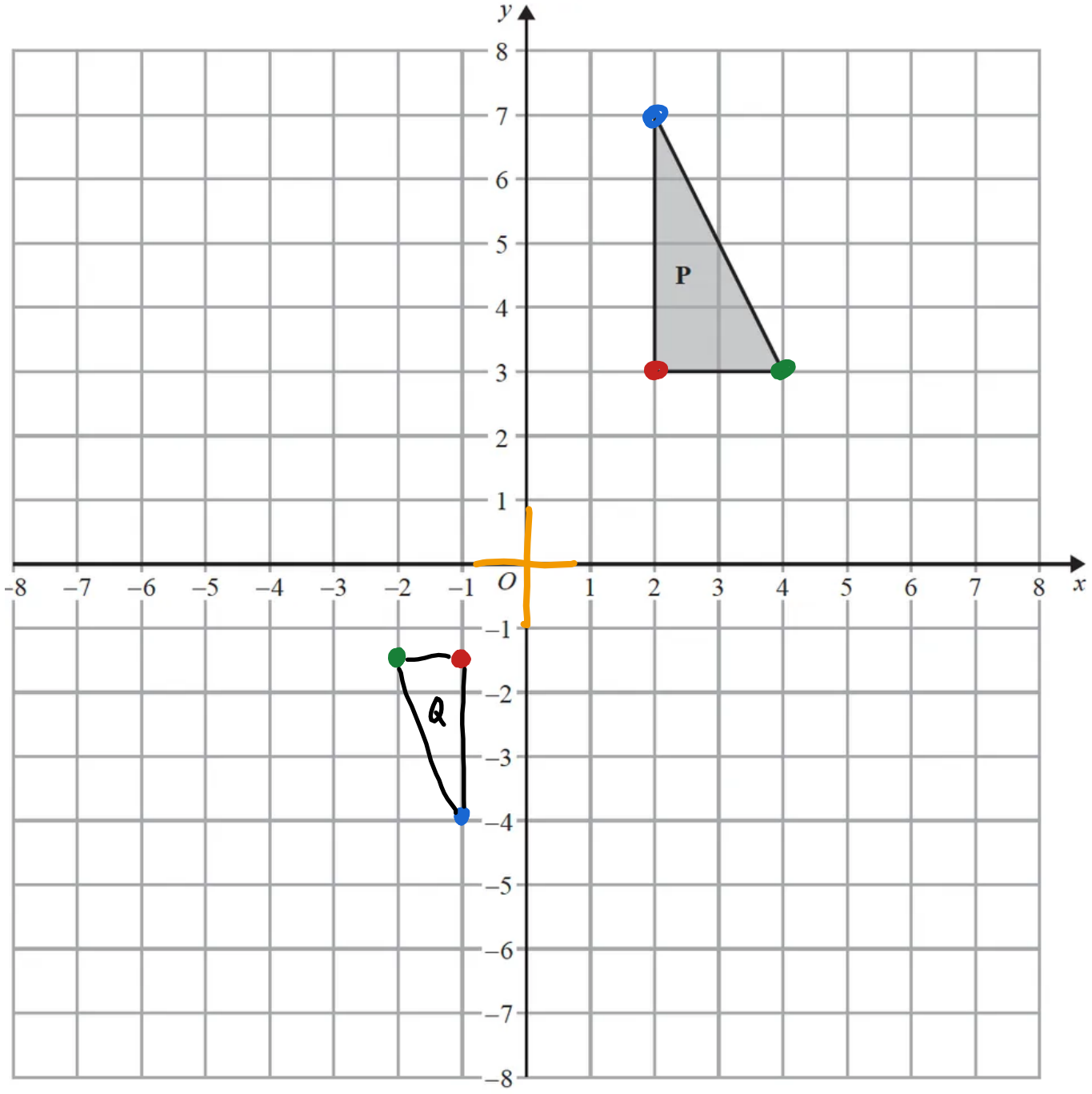
Enlarging with Negative and Fractional Scale Factors



These questions represent all of the times that this topic has appeared in unlocked Pearson Edexcel GCSE maths papers as of July 2023. More questions can be found at examq.co.uk

Question	Where the question appeared
1	Edexcel, GCSE, Autumn 2017, Paper 1H, Q18
2	Edexcel, GCSE, Autumn 2018, Paper 1H, Q13
3	Edexcel, GCSE, Autumn 2019, Paper 3H, Q9
4	Edexcel, GCSE, Autumn 2020, Paper 2H, Q15
5	Edexcel, GCSE, Summer 2018, Paper 2H, Q7
6	Edexcel, GCSE, Summer 2019, Paper 3H, Q8

1



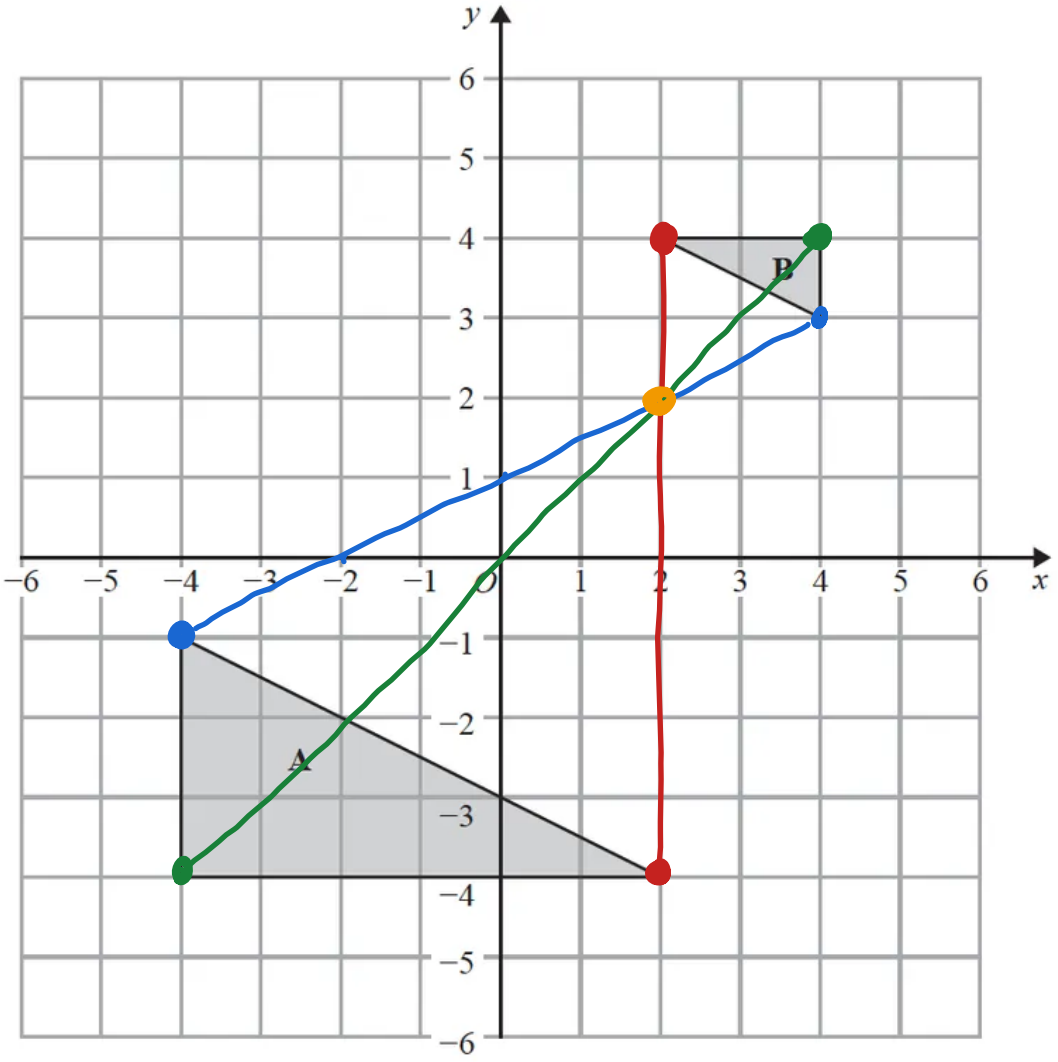
Enlarge shape **P** by scale factor $-\frac{1}{2}$ with centre of enlargement (0, 0).

Label your image **Q**.

(Total for Question 18 is 2 marks)

[Edexcel, GCSE, Autumn 2017, Paper 1H, Q18]

2



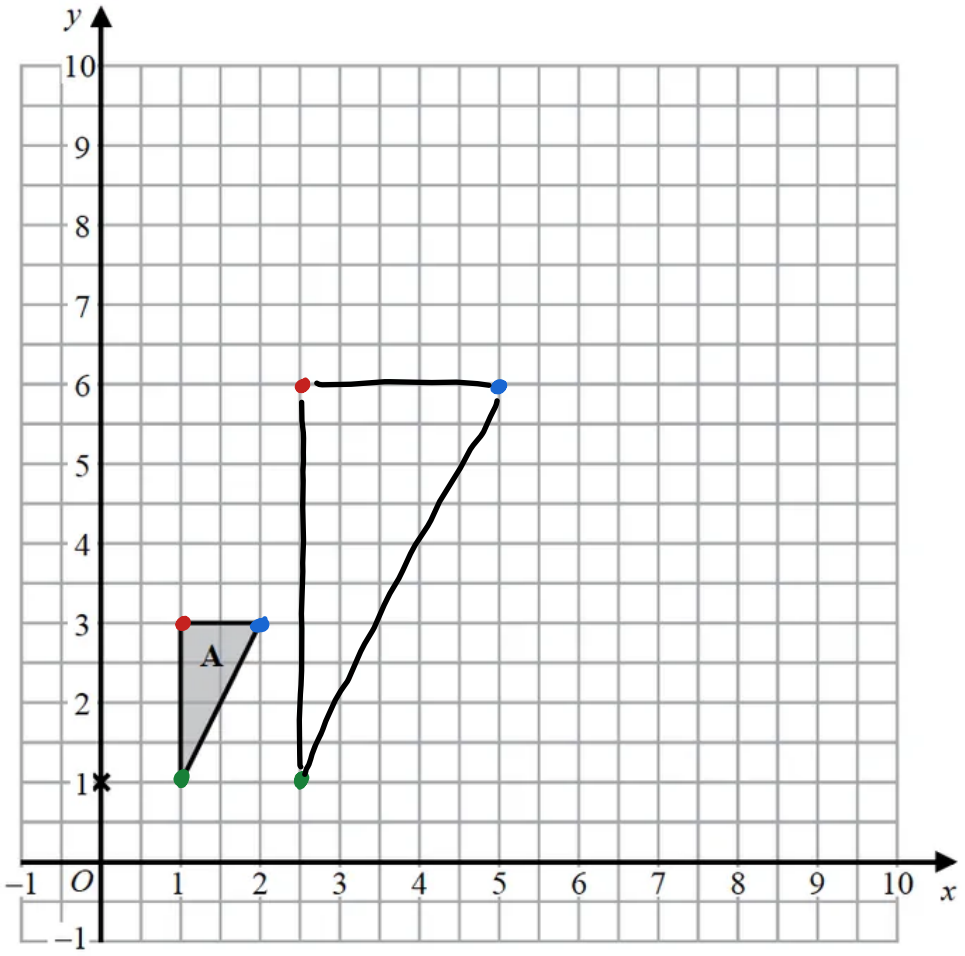
Describe fully the single transformation that maps triangle **A** onto triangle **B**.

Enlargement. Scale factor $-\frac{1}{3}$. Centre (2, 2)

(Total for Question 13 is 2 marks)

[Edexcel, GCSE, Autumn 2018, Paper 1H, Q13]

3

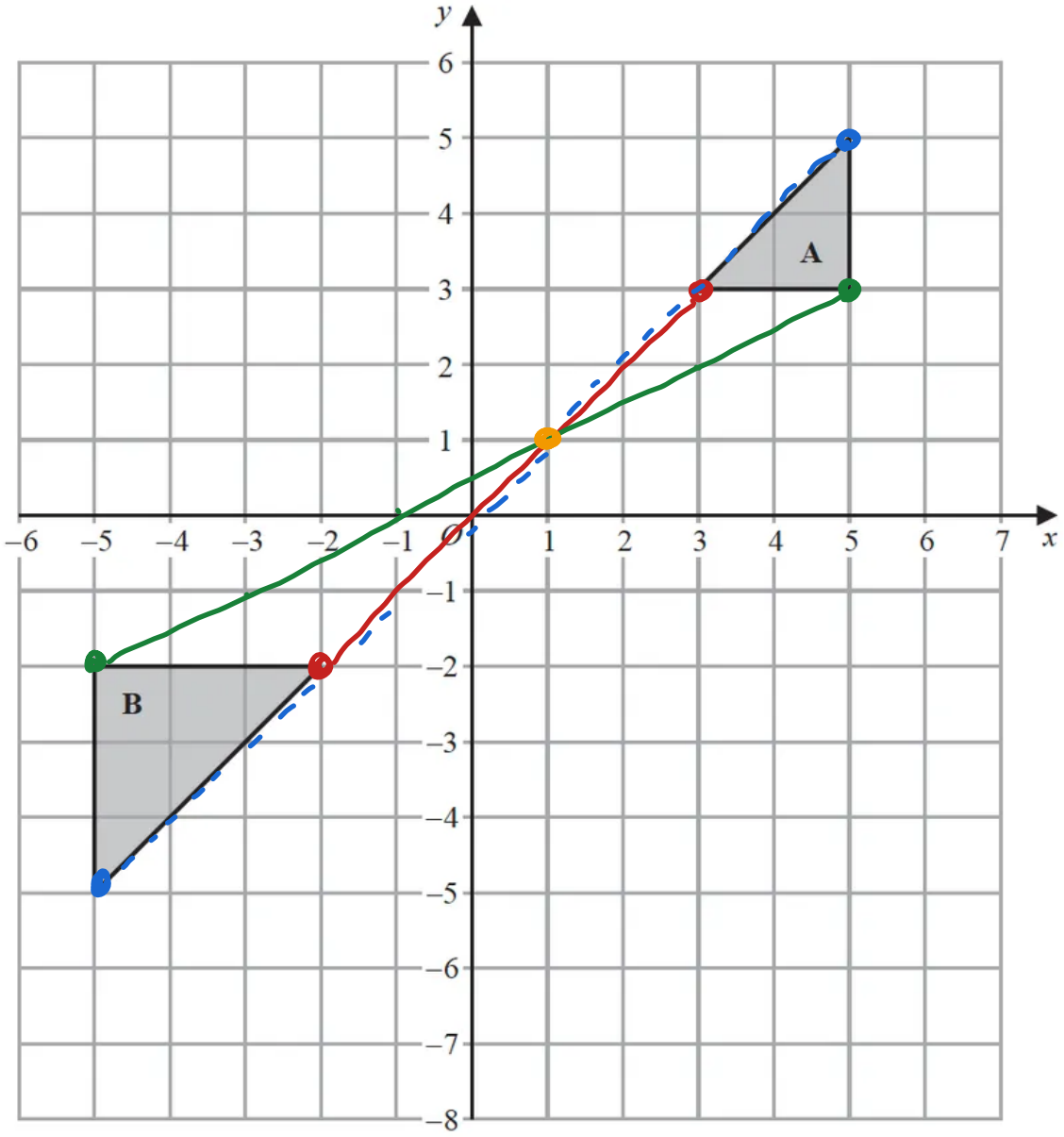


Enlarge triangle **A** by scale factor 2.5 with centre (0, 1)

(Total for Question 9 is 2 marks)

[Edexcel, GCSE, Autumn 2019, Paper 3H, Q9]

4



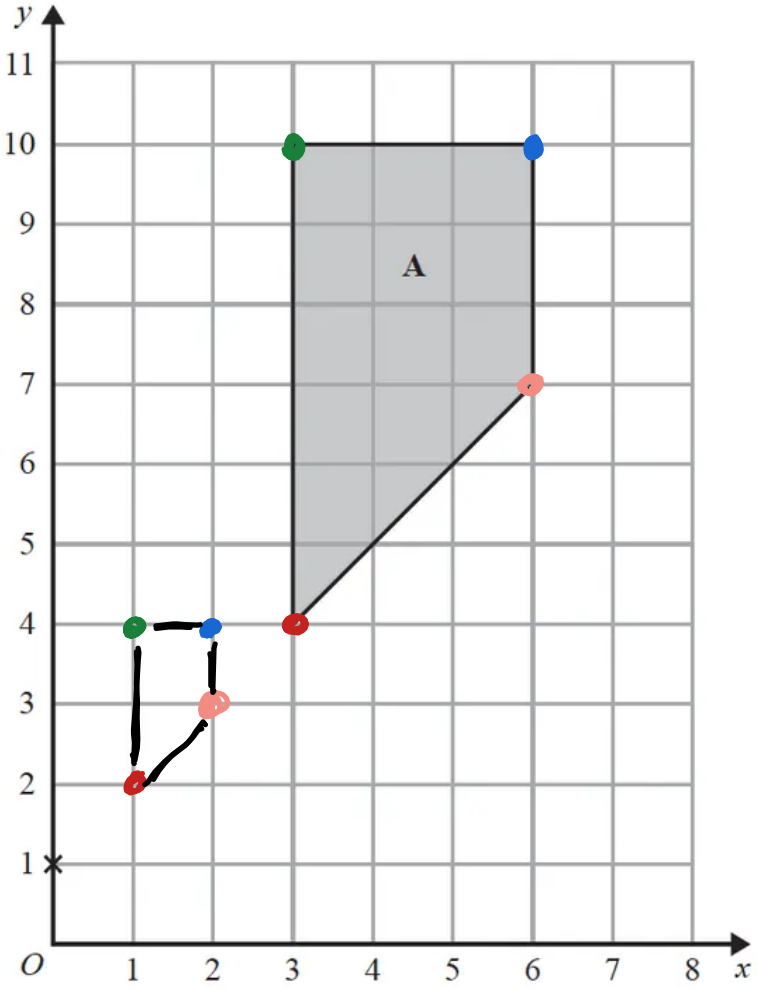
Describe fully the single transformation that maps triangle **A** onto triangle **B**.

Enlargement. Scale factor 1.5. Centre (1, 1)

(Total for Question 15 is 2 marks)

[Edexcel, GCSE, Autumn 2020, Paper 2H, Q15]

5

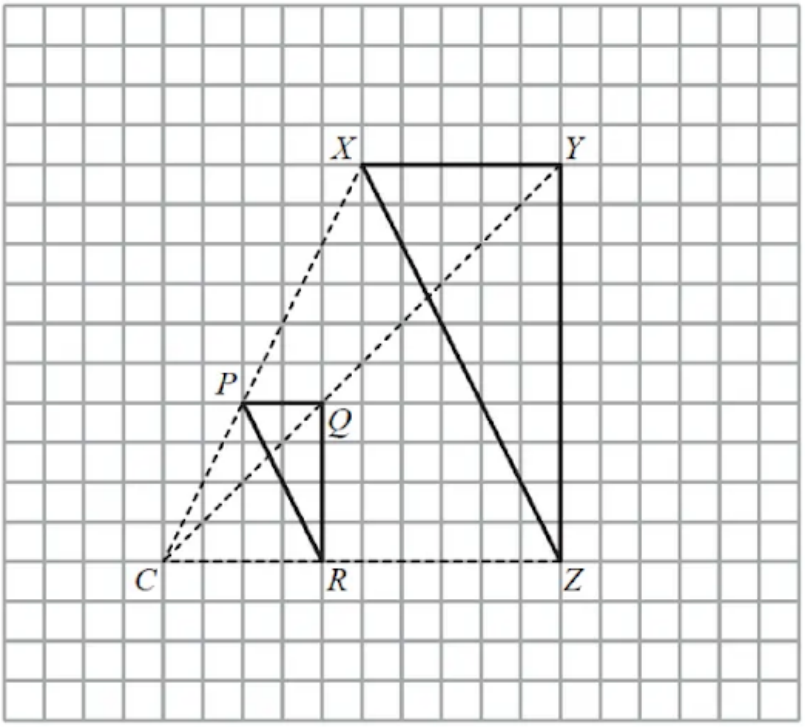


Enlarge shape **A** by scale factor $\frac{1}{3}$ centre (0, 1)

(Total for Question 7 is 2 marks)

[Edexcel, GCSE, Summer 2018, Paper 2H, Q7]

6



Roy is going to enlarge triangle PQR with centre C and scale factor $1\frac{1}{2}$

He draws triangle XYZ.

(b) Explain why Roy's diagram is **not** correct.

Roy has enlarged on a scale factor of $2\frac{1}{2}$.

(1)

(Total for Question 8 is 2 marks)

[Edexcel, GCSE, Summer 2019, Paper 3H, Q8]