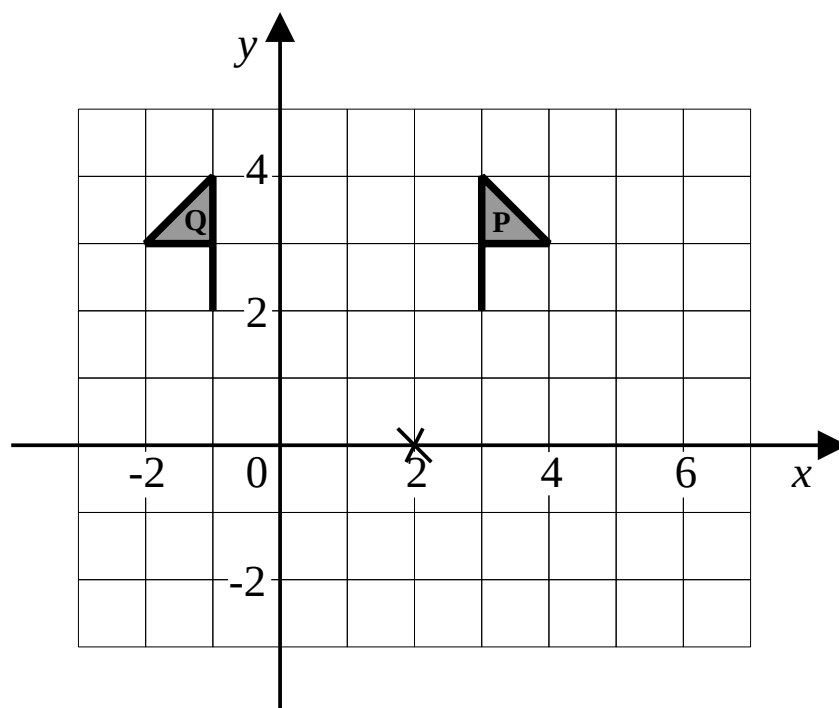


5.5 Homework (Examination Style Questions)

GCSE Mathematics Transformation Geometry

Question 1



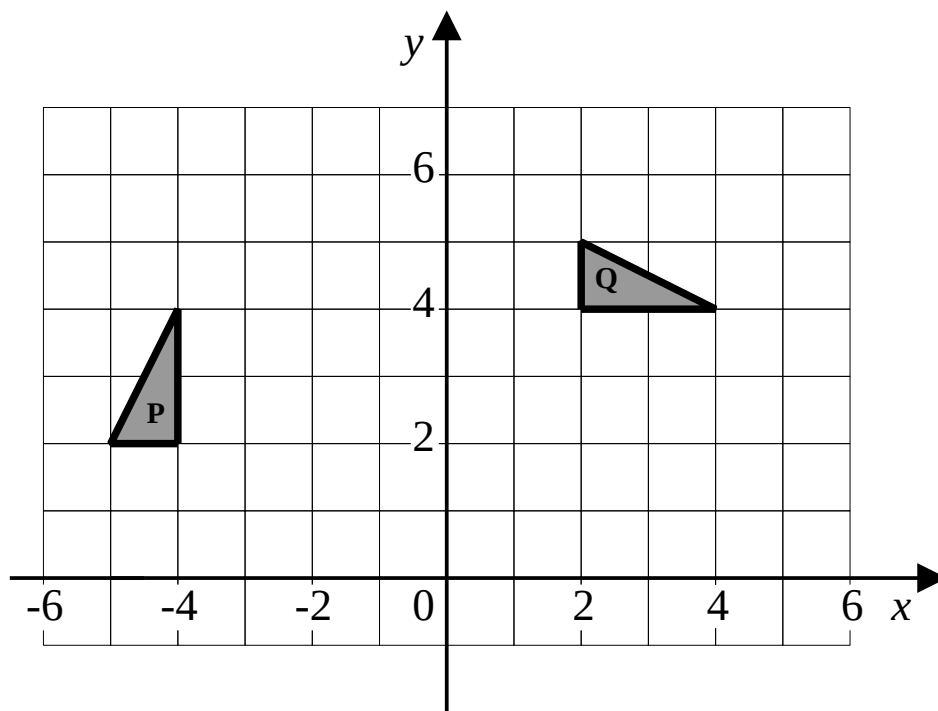
- (a) Describe fully the single transformation that maps shape **P** onto shape **Q**.

[2 marks]

- (b) On the grid, rotate shape **P** 90° clockwise about the point $(2, 0)$.
Label the new shape **R**.

[2 marks]

Question 2



- (a) Describe fully the single transformation that maps triangle **P** onto triangle **Q**.

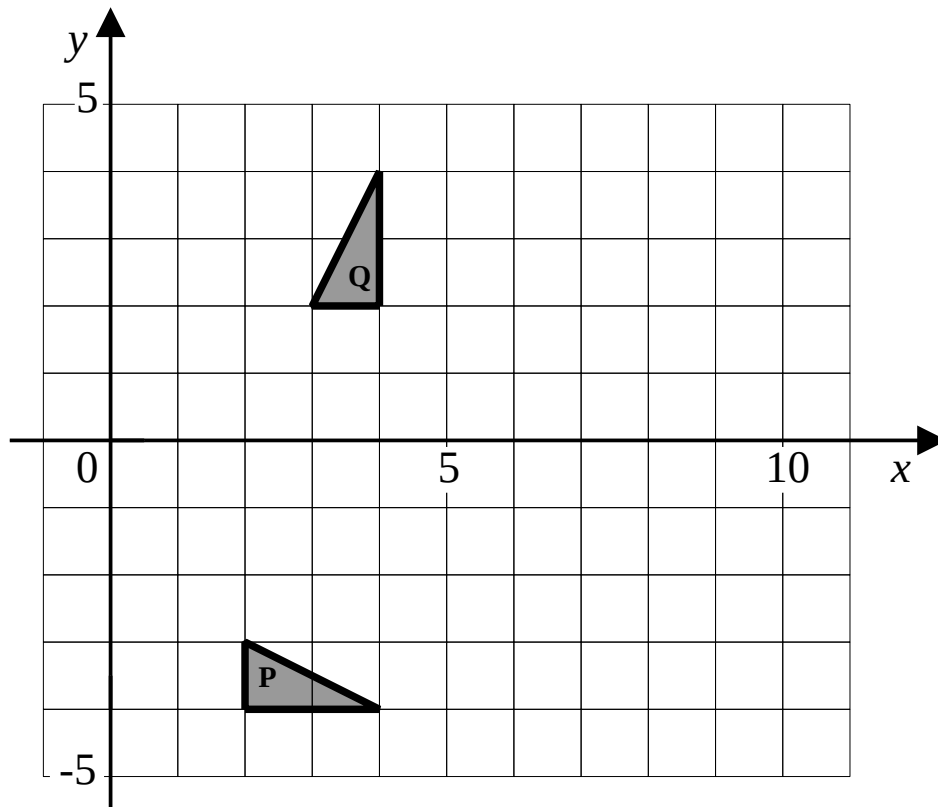
[3 marks]

- (b) Reflect triangle **Q** in the line $y = x$.

Label the new triangle **R**.

[2 marks]

Question 3



- (a) Describe fully the single transformation that maps triangle **P** onto triangle **Q**.

[3 marks]

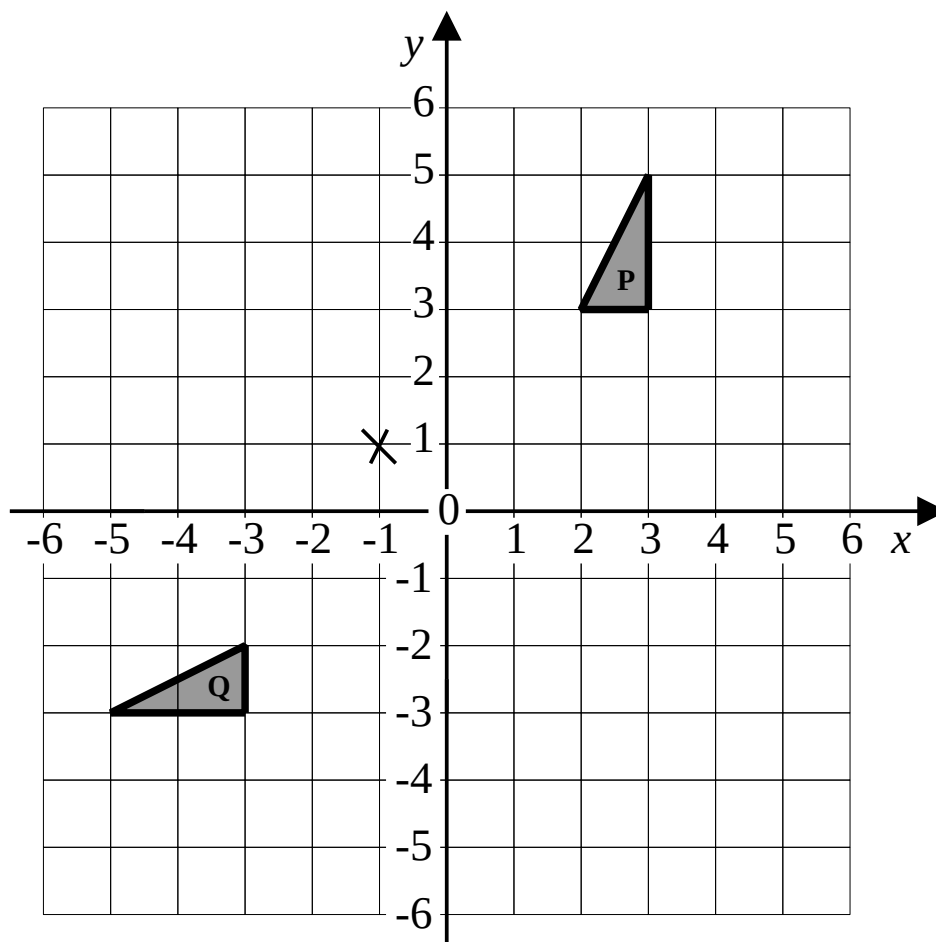
- (b) On the grid, translate triangle **Q** by the vector $\begin{pmatrix} 4 \\ -2 \end{pmatrix}$
Label the new triangle **R**.

[1 mark]

- (c) Describe fully the single transformation that maps triangle **P** onto triangle **R**.

[2 marks]

Question 4



- (a) Describe fully the single transformation that maps triangle **P** onto triangle **Q**.

[2 marks]

- (b) Rotate triangle **Q** through 90° anti-clockwise about $(-1, 1)$.
Label the new triangle **R**.

[2 marks]

- (c) Describe fully the single transformation that maps triangle **P** onto triangle **R**.

[2 marks]

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Teachers may obtain detailed worked solutions to the exercises by email from mhh@shrewsbury.org.uk