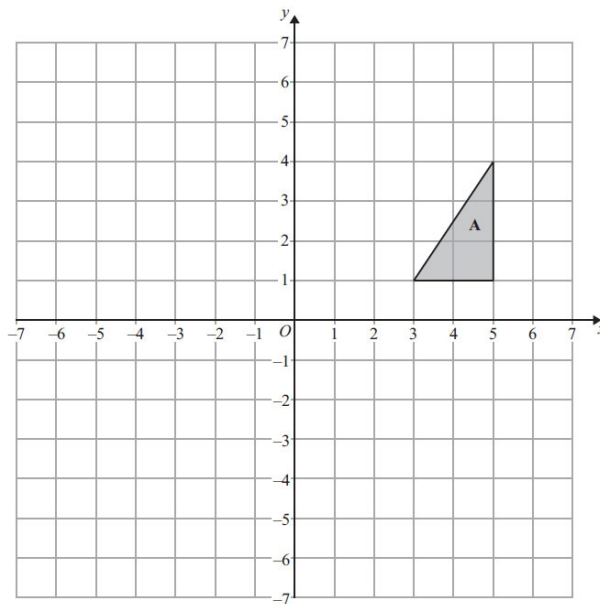


Performing Transformations

Q1.



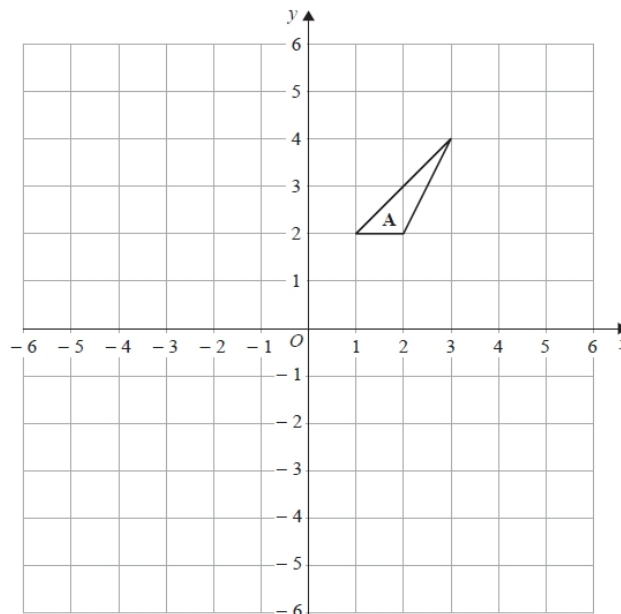
Triangle **A** is reflected in the x -axis to give triangle **B**.

Triangle **B** is then reflected in the line $x = 1$ to give triangle **C**.

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

.....(Total for Question is 3 marks)

Q2.



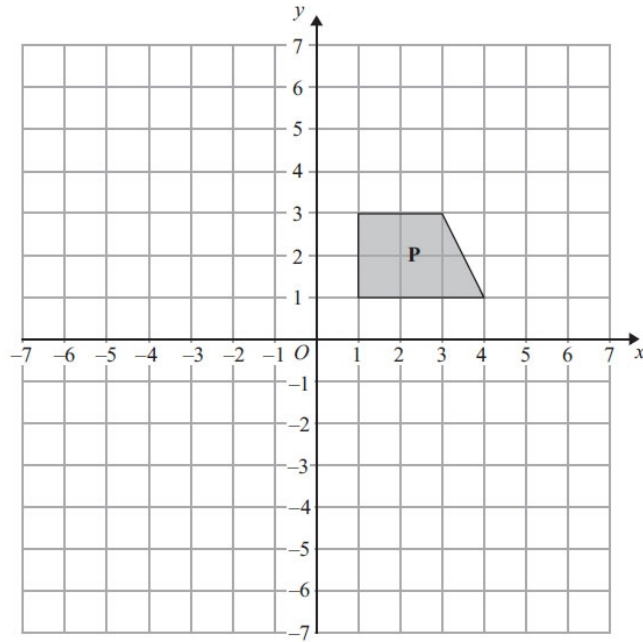
Triangle **A** is rotated 90° clockwise about the point $(0, 1)$ to give triangle **B**.

Triangle **B** is translated by the vector $\begin{pmatrix} -3 \\ -1 \end{pmatrix}$ to give triangle **C**.

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

.....(Total for question = 3 marks)

Q3.



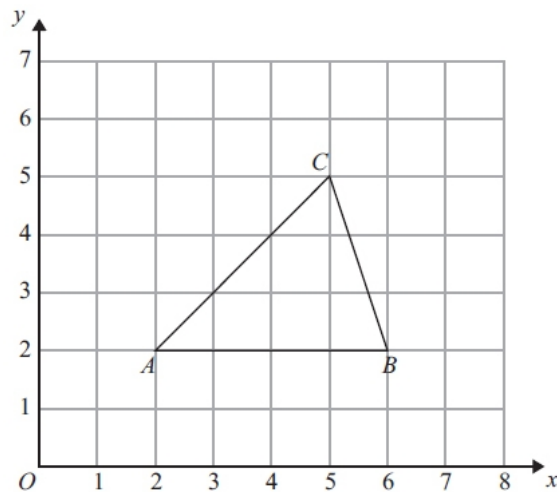
Shape **P** is reflected in the line $x = -1$ to give shape **Q**.

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**.

.....(Total for Question is 3 marks)

Q4.



Triangle *ABC* is drawn on a centimetre grid.

A is the point (2, 2).

B is the point (6, 2).

C is the point (5, 5).

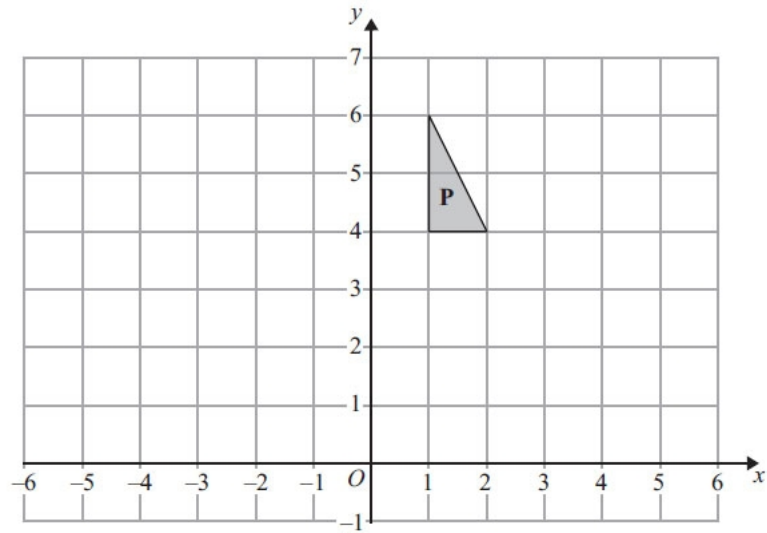
Triangle *PQR* is an enlargement of triangle *ABC* with scale factor $\frac{1}{2}$ and centre (0, 0).

Work out the area of triangle *PQR*.

..... cm²

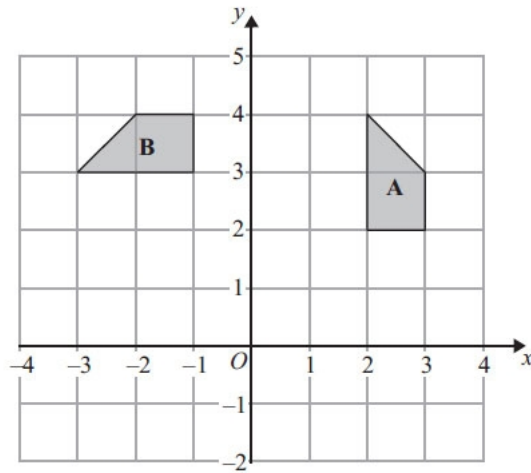
(Total for Question is 3 marks)

Q5.



(a) Reflect shape **P** in the line $x = 3$

(2)



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

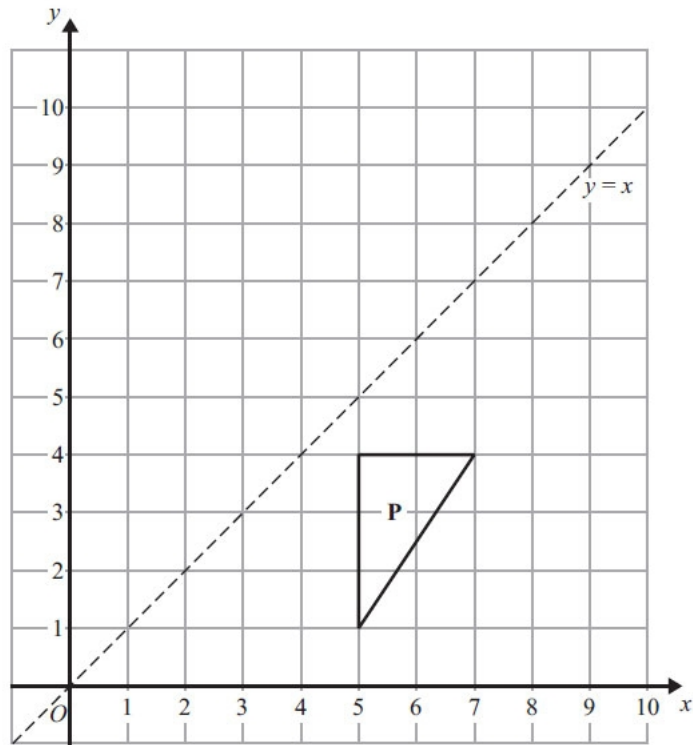
.....
.....
.....

(3)

(Total for Question is 5 marks)

Q6.

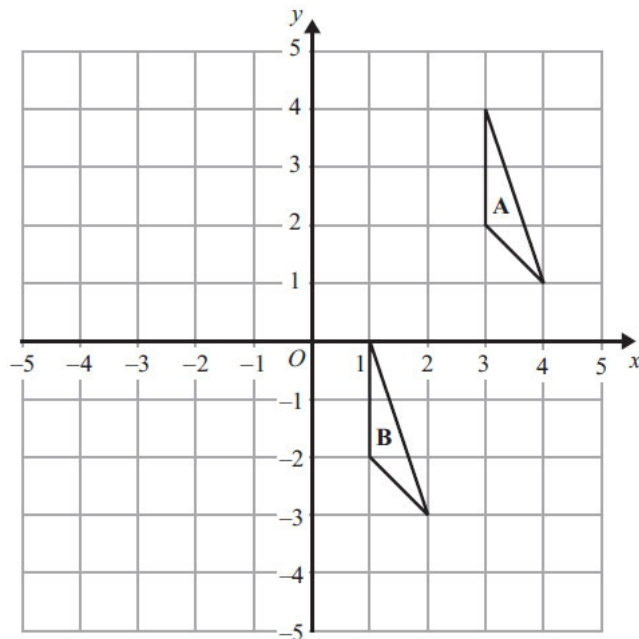
(a)



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

(2)

(b)



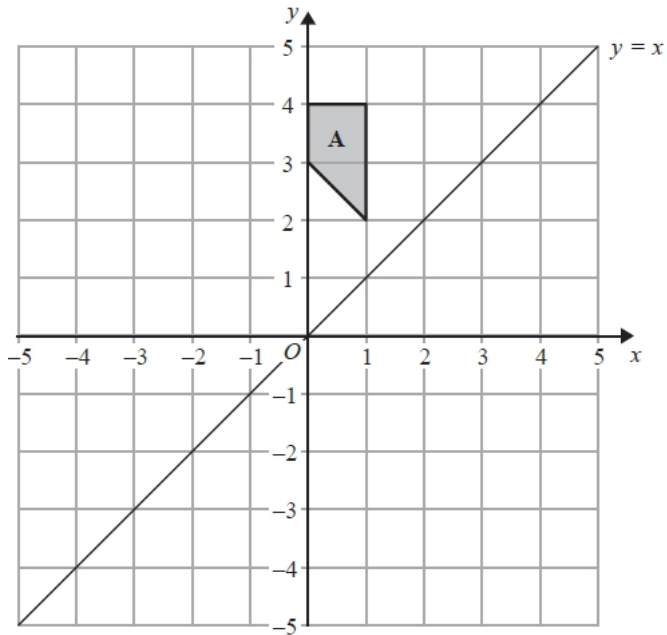
Describe fully the single transformation that maps triangle **A** onto triangle **B**.

.....
.....

(2)

(Total for Question is 4 marks)

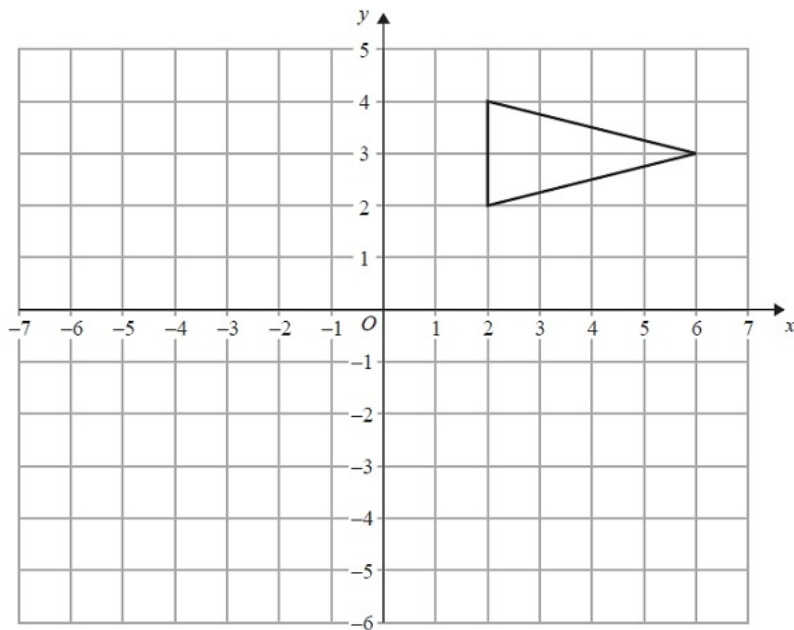
Q7.



On the grid, reflect shape **A** in the line $y = x$.

(2)

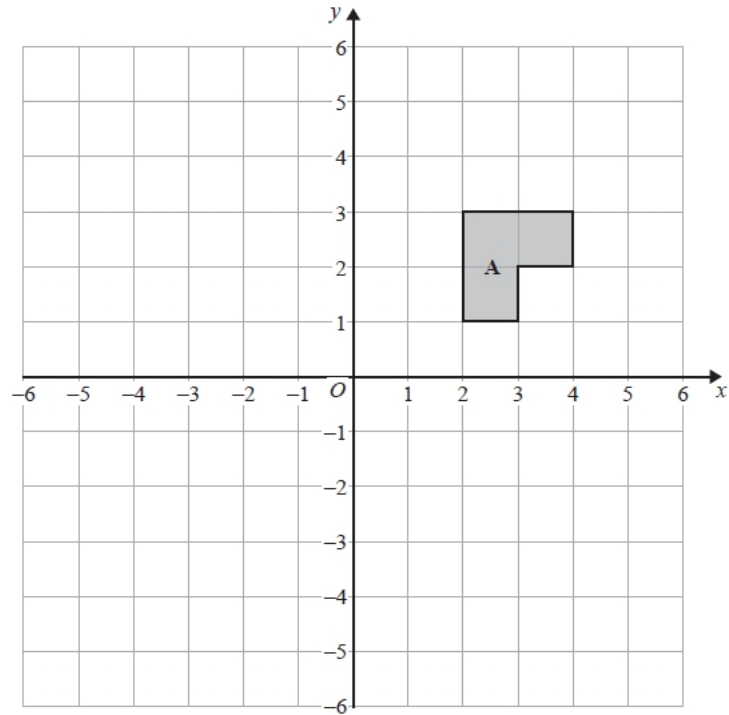
Q8.



On the grid, enlarge the triangle by scale factor $-\frac{1}{2}$, centre $(0, -2)$.

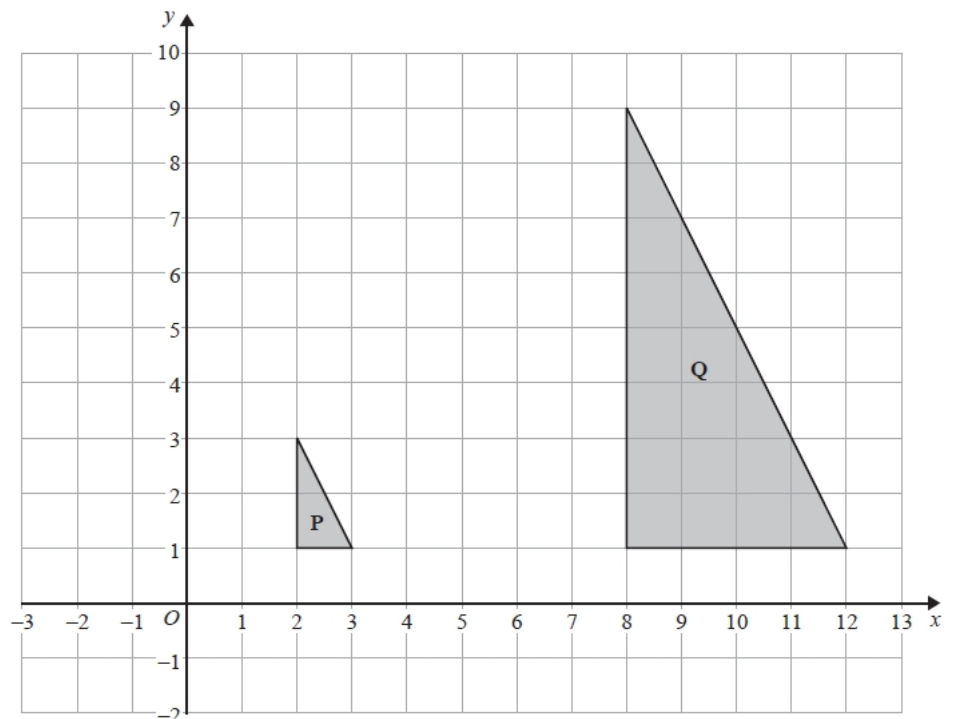
(Total for Question is 2 marks)

Q9.



(a) Rotate shape **A** 180° about the point $(0, 0)$.

(2)



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

.....
.....

(3)

(Total for question = 5 marks)