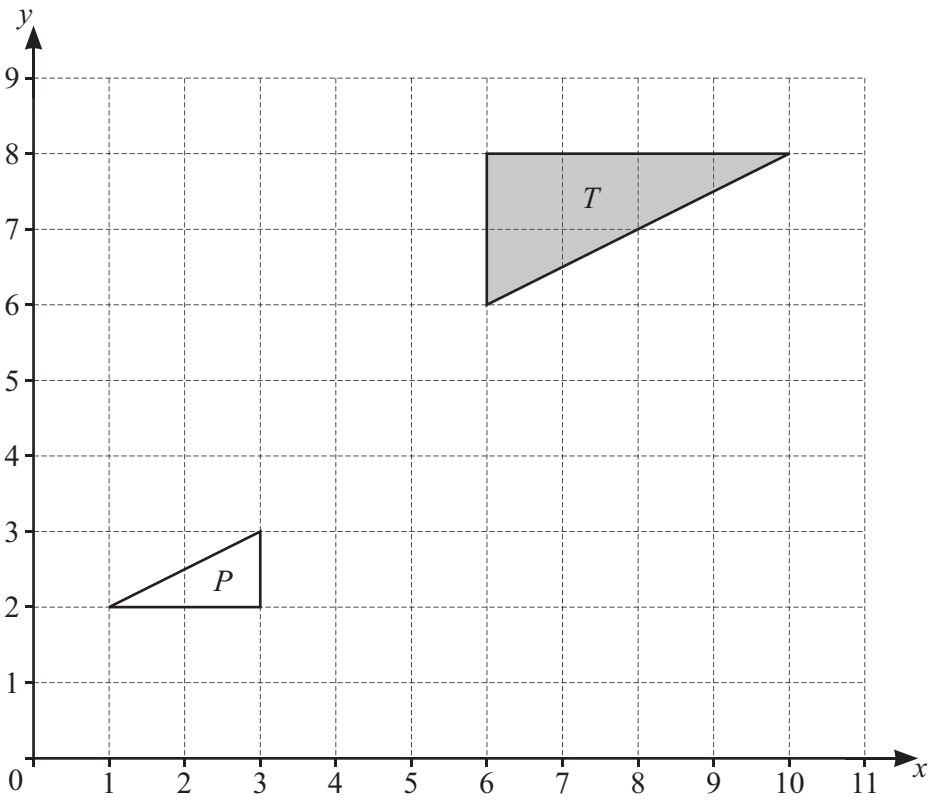
1



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

.....

..... [3]

[Total: 3]

2 **(a)** Draw the image of triangle T after a reflection in the line $y = x$. [2]

(b) Draw the image of triangle T after a translation by the vector $\begin{pmatrix} -1 \\ 3 \end{pmatrix}$. [2]

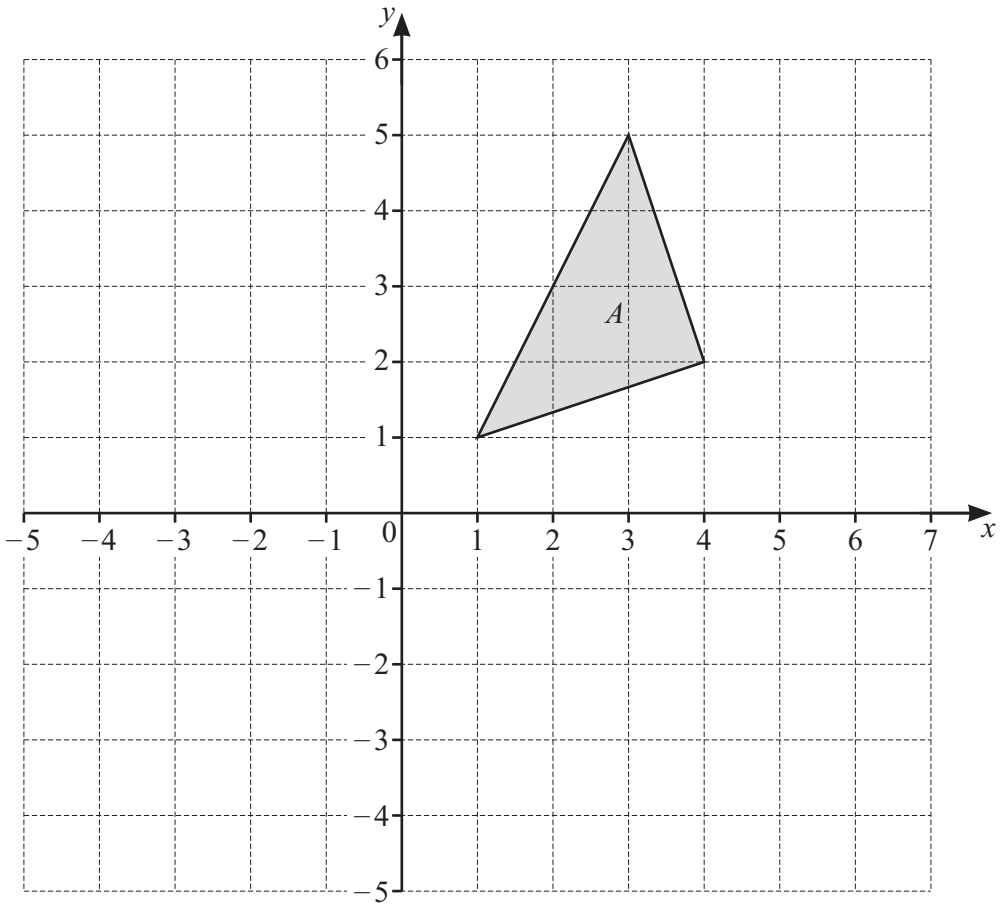
(c) Describe fully the **single** transformation that maps triangle T onto triangle A.

.....

..... [3]

[Total: 7]

3



On the grid, draw the image of

(a) triangle A after a reflection in the y-axis, [1]

(b) triangle A after a translation by the vector $\begin{pmatrix} -3 \\ -4 \end{pmatrix}$. [2]

[Total: 3]

4 **(a)** Describe fully the **single** transformation that maps

(i) triangle A onto triangle B,

.....

..... [3]

(ii) triangle A onto triangle C.

.....

..... [3]

(b) Draw the image of triangle A after a translation by the vector $\begin{pmatrix} 2 \\ 10 \end{pmatrix}$. [2]

[Total: 8]

5 **(a)** Describe fully the **single** transformation that maps

(i) triangle A onto triangle B,

.....

..... [3]

(ii) triangle A onto triangle C.

.....

..... [3]

(b) Draw the image of triangle A after a translation by the vector $\begin{pmatrix} -5 \\ -10 \end{pmatrix}$. [2]

(c) Draw the image of triangle A after a reflection in the line $y = 4$. [2]

[Total: 10]

6 **(a)** Draw the image of triangle T after a reflection in the line $y = -1$. [2]

(b) Draw the image of triangle T after a rotation through 90° clockwise about (0, 0). [2]

(c) Describe fully the **single** transformation that maps triangle T onto triangle A.

.....

..... [2]

[Total: 6]

(a) **(i)** Draw the image of triangle A after a reflection in the line $y = -x$. [2]

(ii) Draw the image of triangle A after a translation by the vector $\begin{pmatrix} -2 \\ -9 \end{pmatrix}$. [2]

(b) Describe fully the **single** transformation that maps

(i) triangle A onto triangle B,

.....

..... [3]

(ii) triangle A onto triangle C.

.....

..... [3]

[Total: 10]

8 **(a)** Describe fully the **single** transformation that maps

(i) triangle A onto triangle B,

.....

..... [2]

(ii) triangle A onto triangle C.

.....

..... [3]

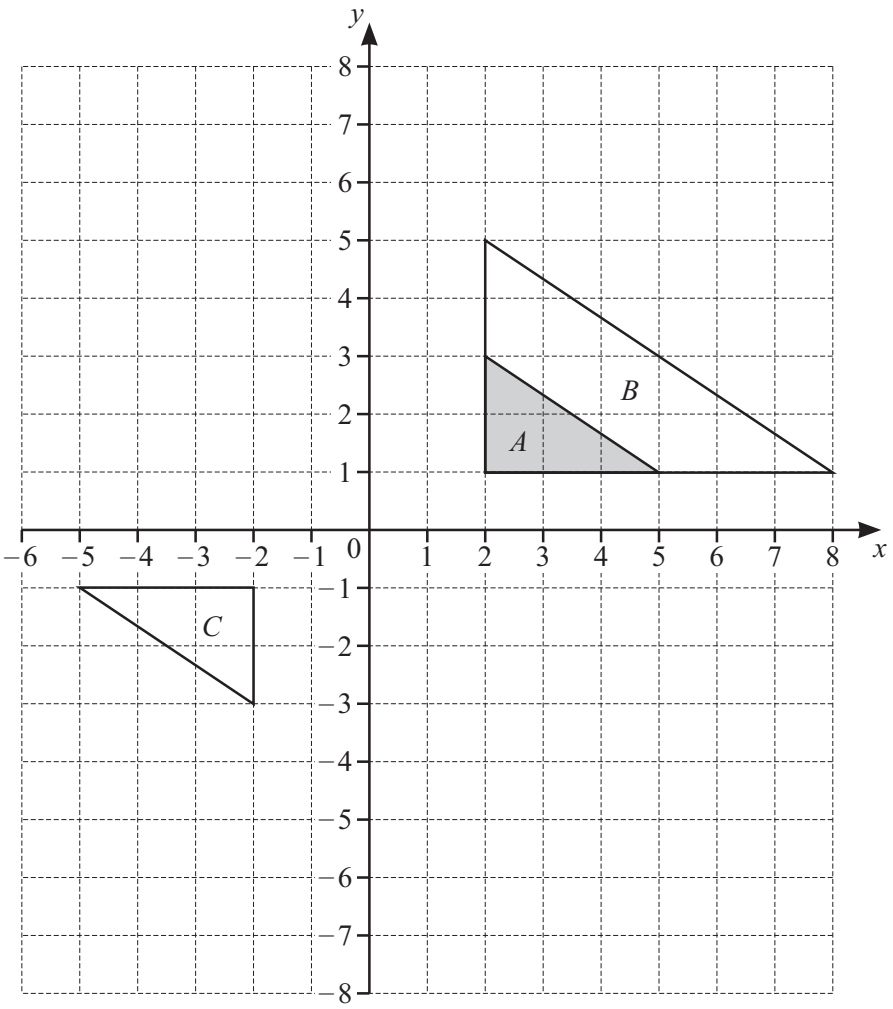
(b) On the grid, draw the image of

(i) triangle A after an enlargement, scale factor $-\frac{1}{2}$, centre (3, 0), [2]

(ii) triangle A after a translation by the vector $\begin{pmatrix} -3 \\ 1 \end{pmatrix}$. [2]

[Total: 9]

9 The grid shows triangles A, B and C.



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

.....

..... [3]

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

.....

..... [3]

(c) Draw the image of

(i) triangle *A* after a translation by the vector $\begin{pmatrix} -5 \\ 3 \end{pmatrix}$, [2]

(ii) triangle *A* after a reflection in the line $y = -2$. [2]

[Total: 10]