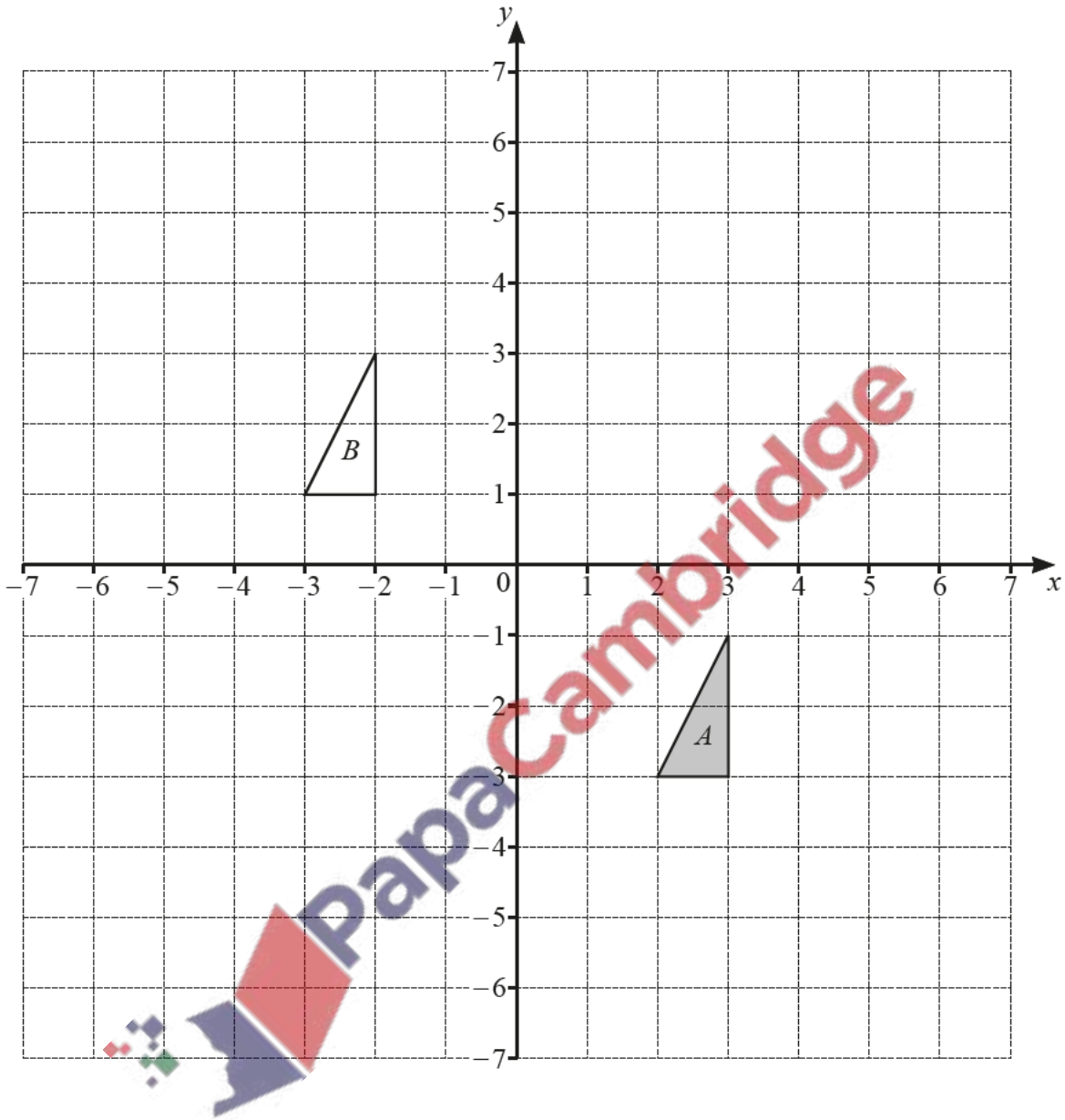
Transformations – 2021 O Level Math D

1. Nov/2021/Paper_11/No.13

The diagram shows triangle A and triangle B.



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

.....

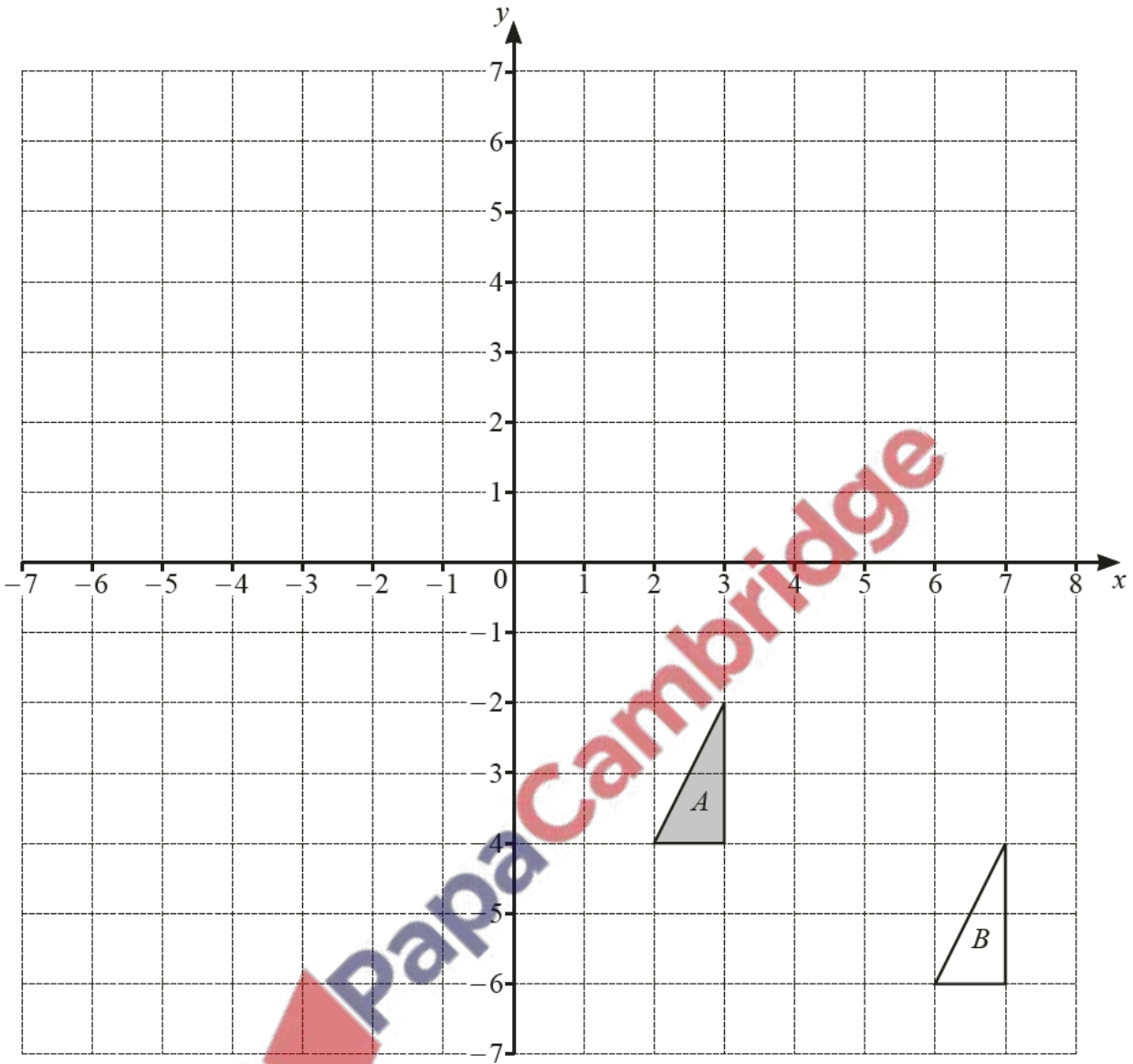
..... [2]

(b) Triangle A is mapped onto triangle C by an enlargement, centre $(0, -1)$ and scale factor 2.

Draw triangle C. [2]

2. Nov/2021/Paper_12/No.10

The diagram shows triangle A and triangle B.



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

.....

..... [2]

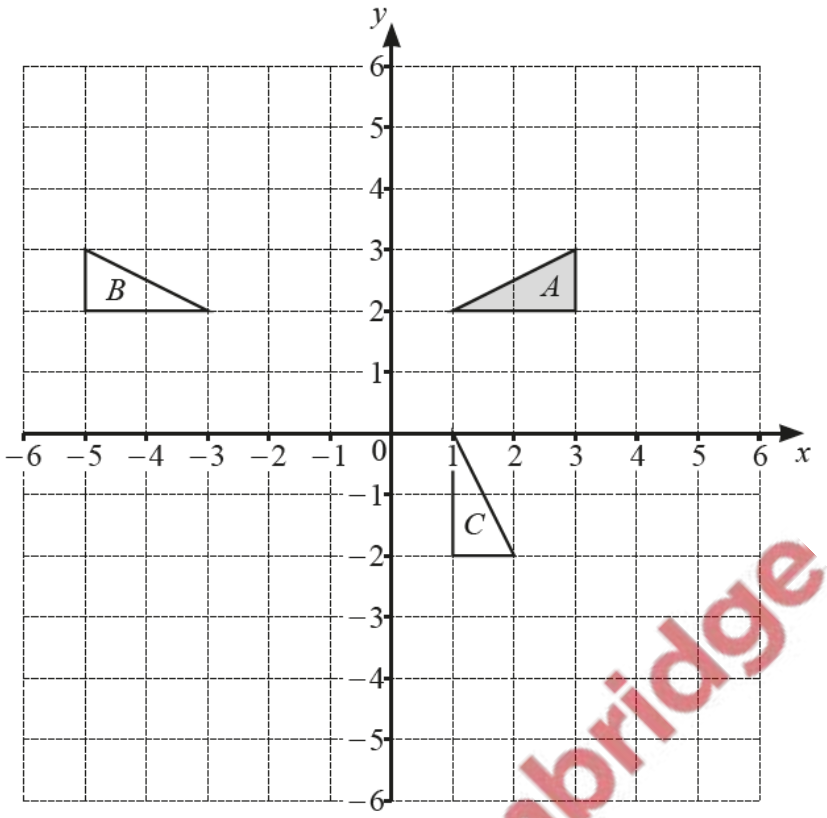
(b) Triangle A is mapped onto triangle C by a rotation, 90° anticlockwise, centre (0, 0).

Draw triangle C. [2]

(c) Triangle A is mapped onto triangle D by an enlargement, scale factor 3, centre (5, −5).

Draw triangle D. [2]

3. June/2021/Paper_11/No.16



Triangles A, B and C are drawn on the grid.

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

.....

..... [2]

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

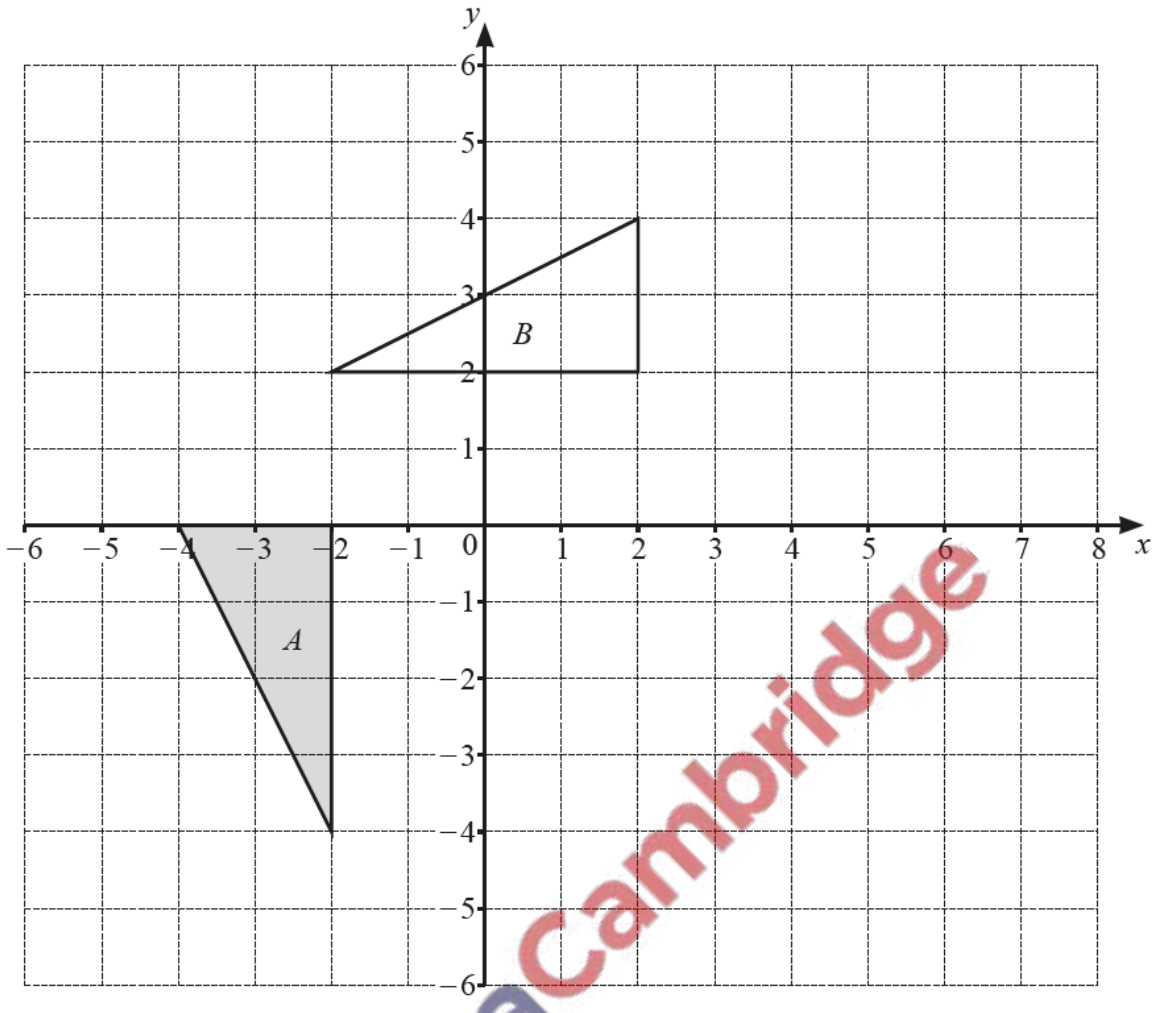
.....

..... [3]

(c) Triangle D is the image of triangle A after an enlargement, scale factor 2, with centre of enlargement (1, 2).

Draw triangle D. [2]

4. June/2021/Paper_12/No.23



Triangle A and triangle B are drawn on the grid.

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

.....

..... [3]

(b) Transformation P is represented by the matrix $\begin{pmatrix} -\frac{1}{2} & 0 \\ 0 & -\frac{1}{2} \end{pmatrix}$.

P maps triangle A onto triangle C.

On the grid, draw triangle C. [2]