# 3.14 Transformations

## Question Paper
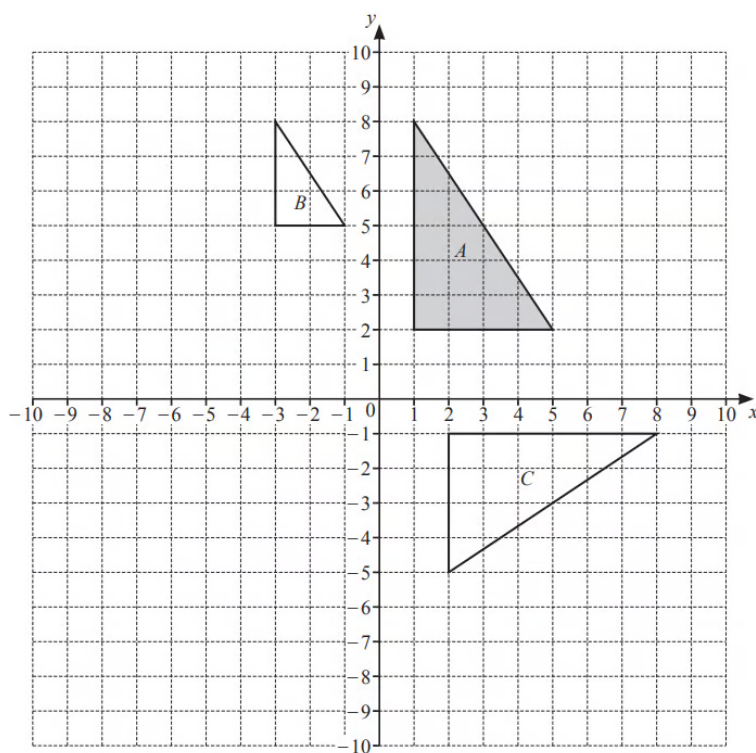
| Course | CIE IGCSE Maths |
|---|---|
| Section | 3. Geometry |
| Topic | 3.14 Transformations |
| Difficulty | Very Hard |

**Time allowed:** 30

**Score:** /24

**Percentage:** /100

## Question 1



Describe fully the **single** transformation that maps
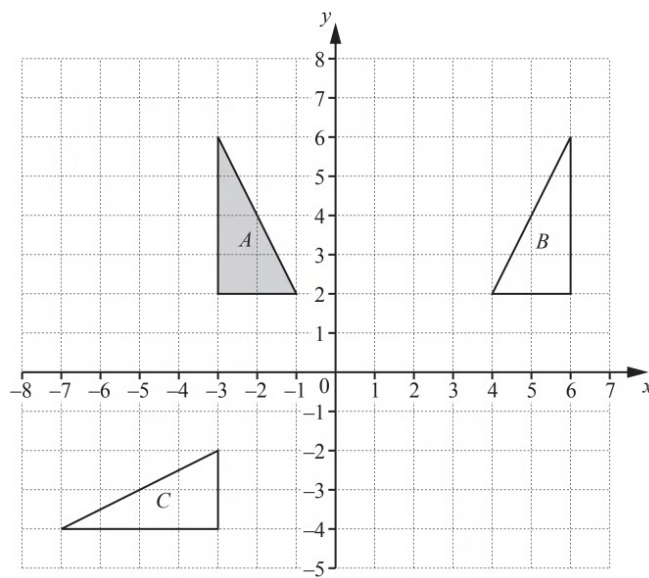
i)

triangle $A$ onto triangle $B$,

[3]

ii)

triangle $A$ onto triangle $C$.

[3]

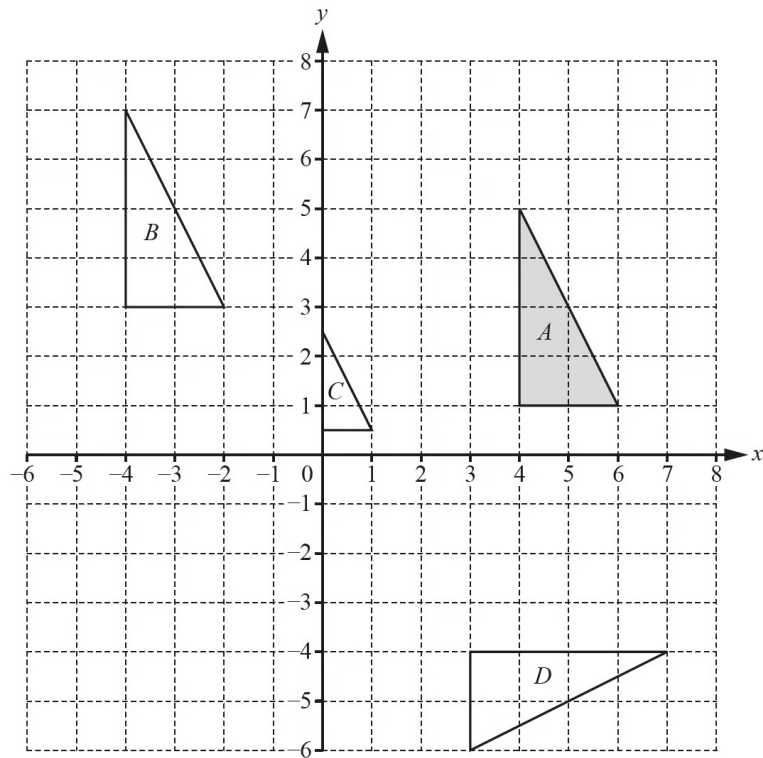**[6 marks]**

## Question 2



On the grid, draw the image of triangle $A$ after an enlargement, scale factor $-\dfrac{1}{2}$, centre $(3, 0)$,
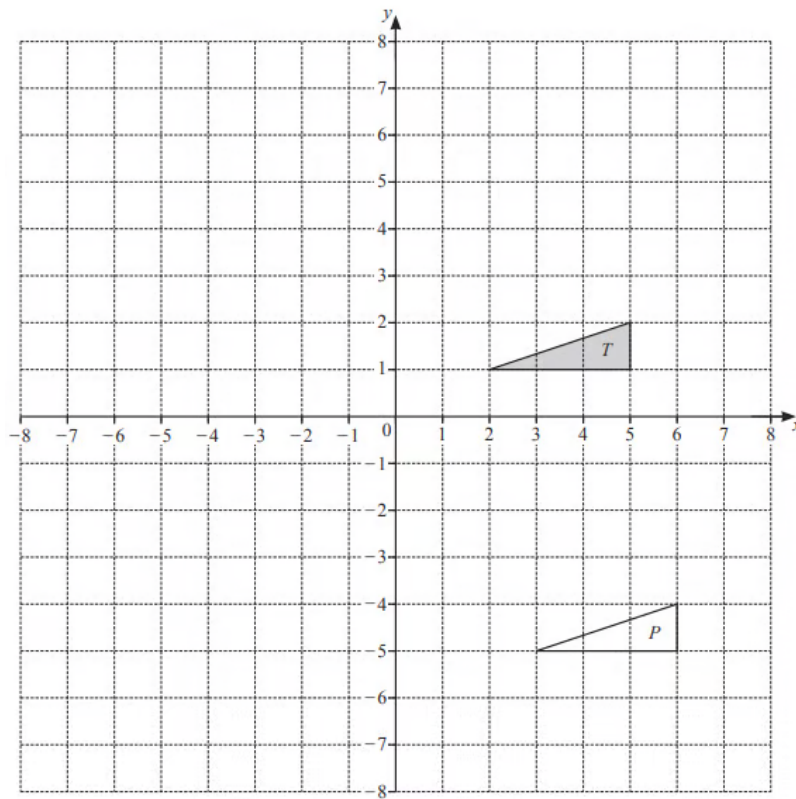
[2]

**[2 marks]**

## Question 3



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

[3]

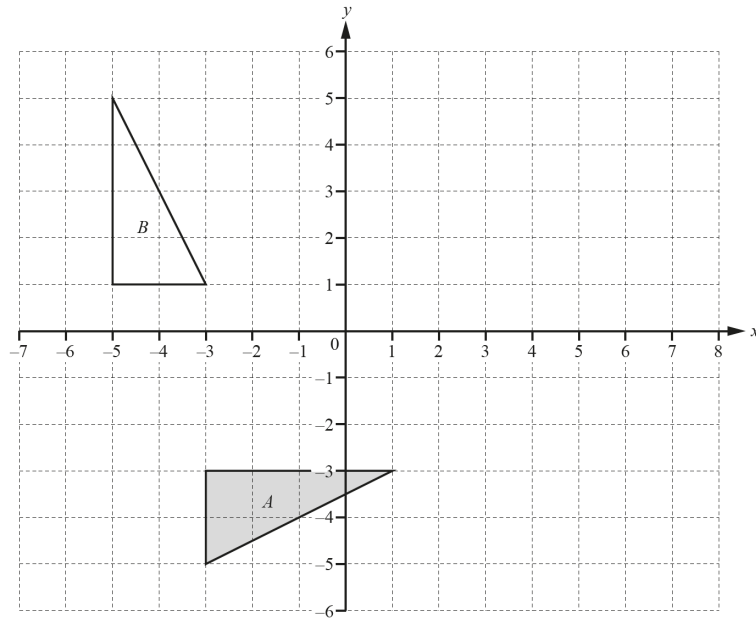**[3 marks]**

## Question 4



Enlarge triangle *T* by a scale factor of –2, centre (1, 0).

[2]

**[2 marks]**

## Question 5



Draw the image of triangle $A$ after an enlargement by scale factor $-\dfrac{1}{2}$, centre $(3, 1)$.

[3]

**[3 marks]**

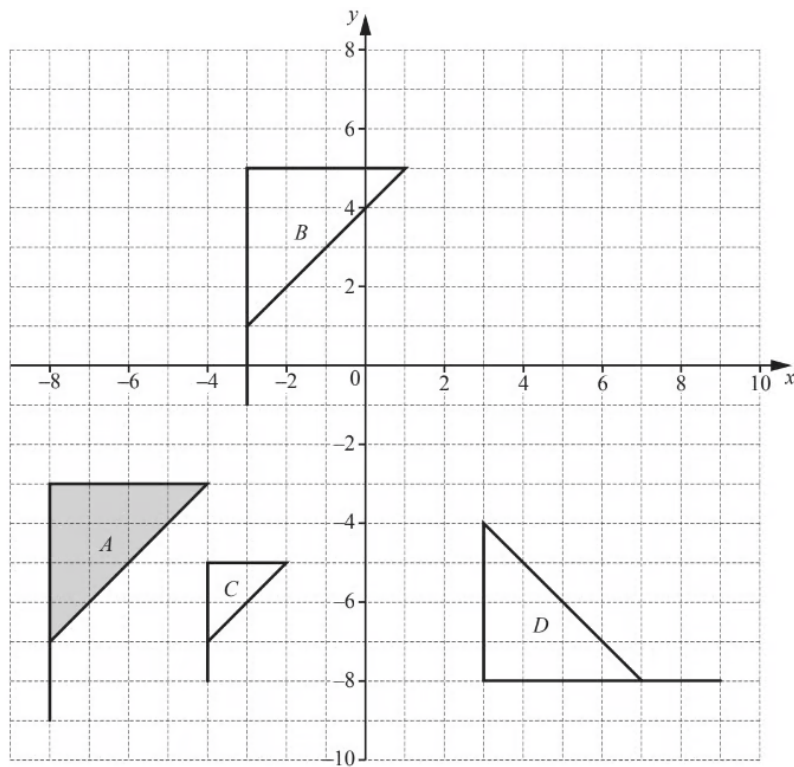## Question 6

A line joins $A(1, 3)$ to $B(5, 8)$.
The line $AB$ is transformed to the line $PQ$.

Describe fully the **single** transformation that maps the line $AB$ onto the line $PQ$ where $P$ is the point $(-2, -6)$ and $Q$ is the point $(-10, -16)$.
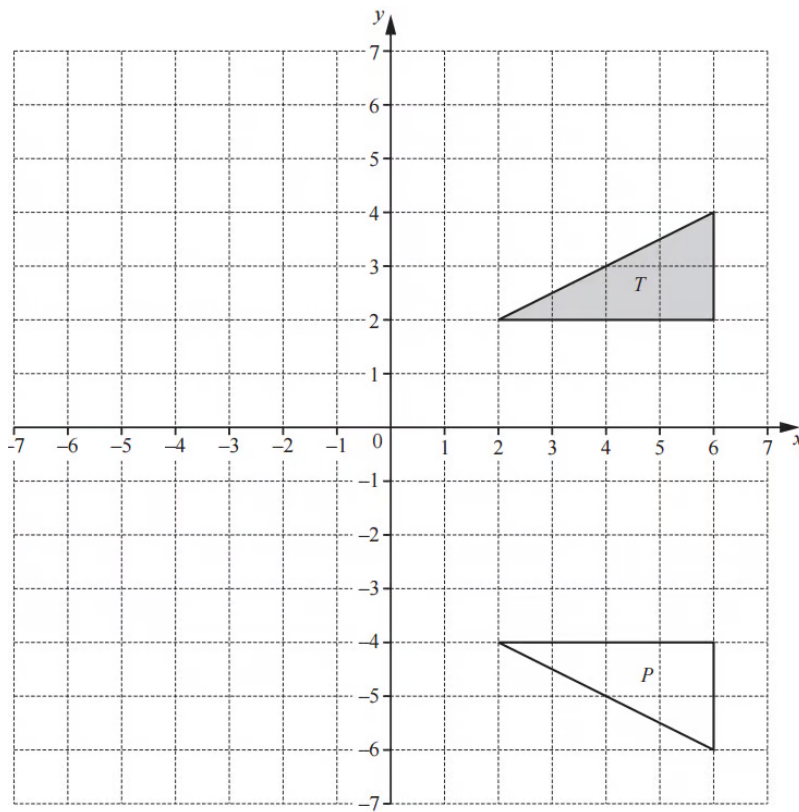
[3]

**[3 marks]**

## Question 7



Describe fully the **single** transformation that maps flag *A* onto flag *C*,

[3]

**[3 marks]**

## Question 8



Enlarge triangle *T* by scale factor $-\dfrac{1}{2}$ with centre $(0, 0)$.

[2]

**[2 marks]**