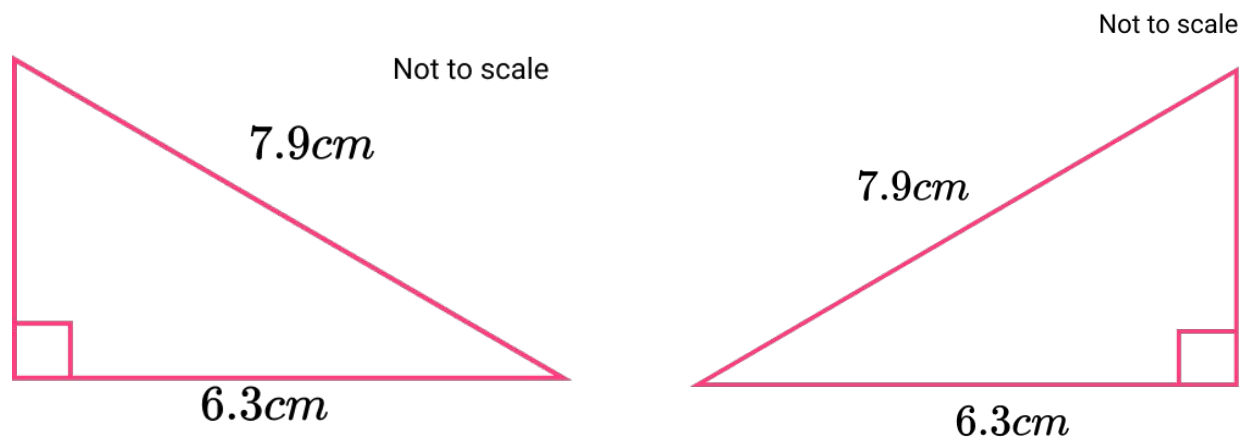# GCSE Exam Questions

Transformations | Geometry & Measure

GCSE Exam Questions: Transformations

1) Explain why the two triangles are congruent.

Not to scale

Not to scale

7.9cm

6.3cm

7.9cm

6.3cm

(1 mark)

2) Triangles *ABC* and *DEF* are two similar isosceles triangles where *AC* = *k* × *EF*.

Not to scale

E

B

D

xcm

7 *cm*

10.5 *cm*

F

A   5cm   *C*
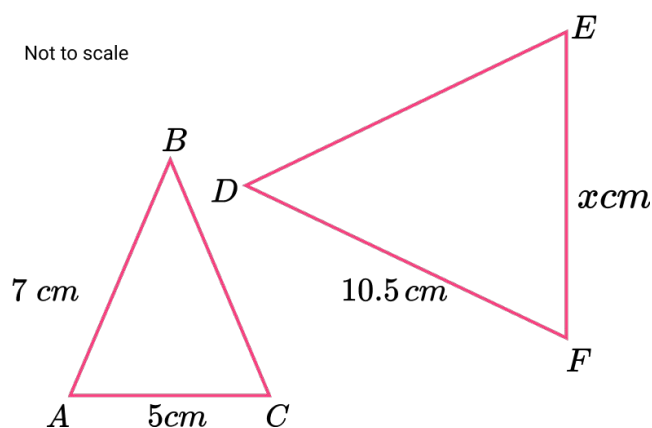
Work out the value of *x*

(2 marks)

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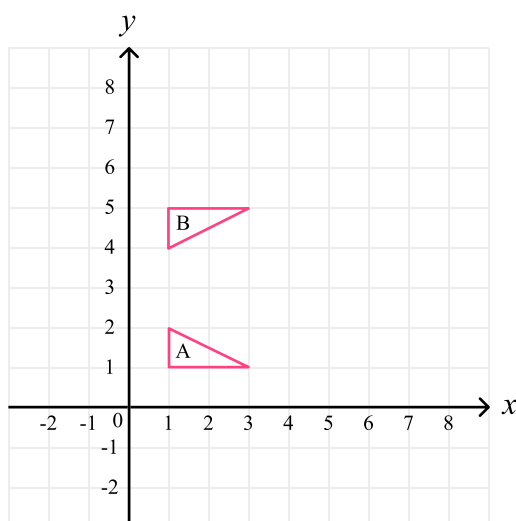
1

GCSE Exam Questions: Transformations

3) (a) Enlarge the shape with scale factor 2, centre (0,0).
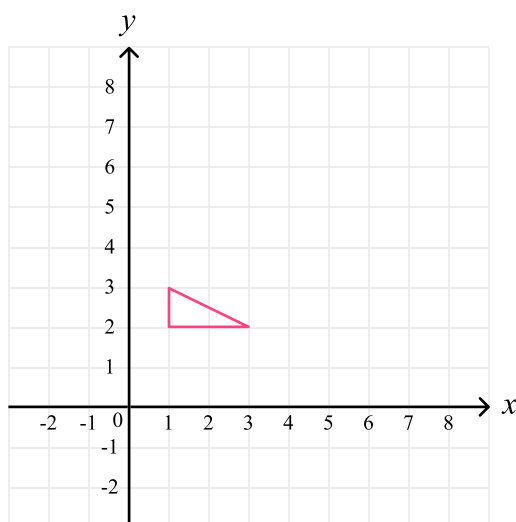
(3)

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

(2)

(5 marks)

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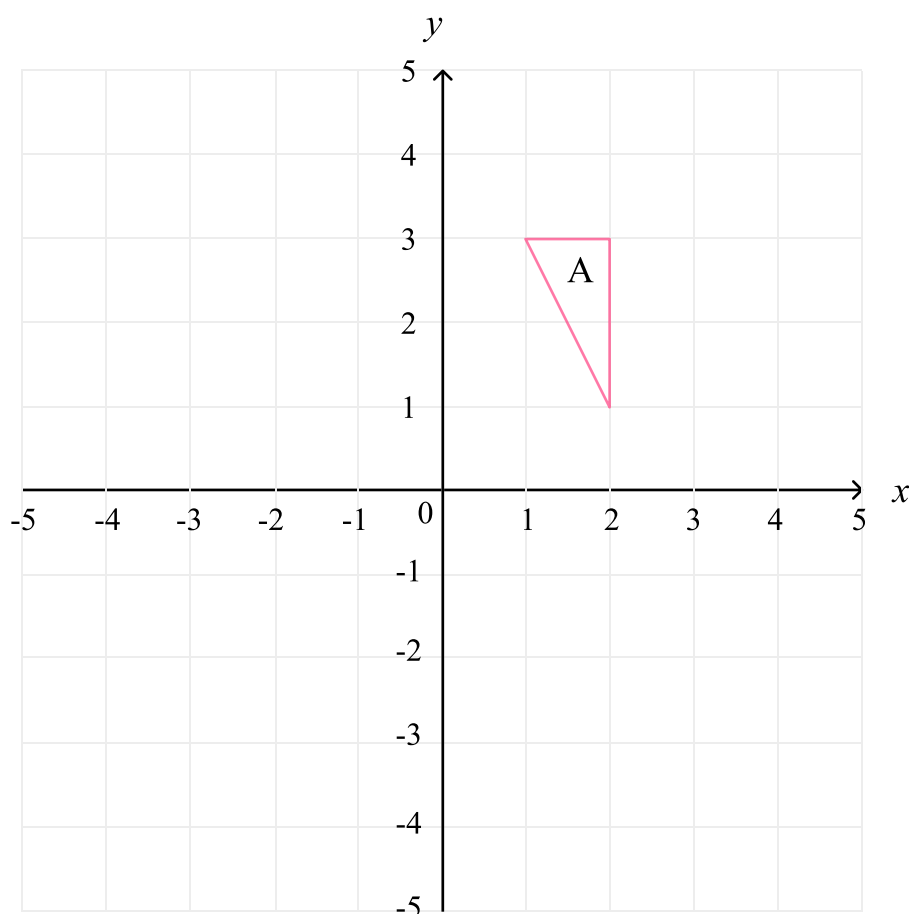
2

GCSE Exam Questions: Transformations

4)   Shape **A** is reflected in the line $x = -1$ to give shape **B**.
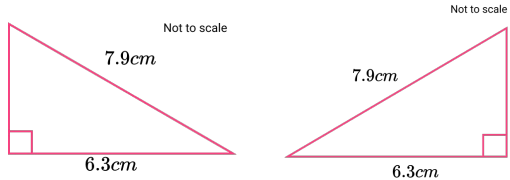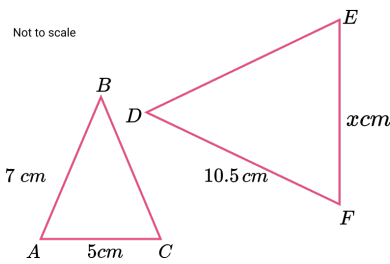
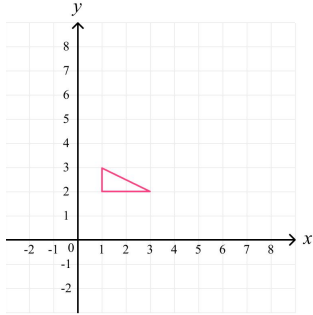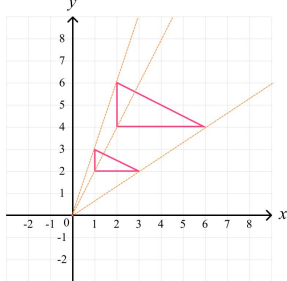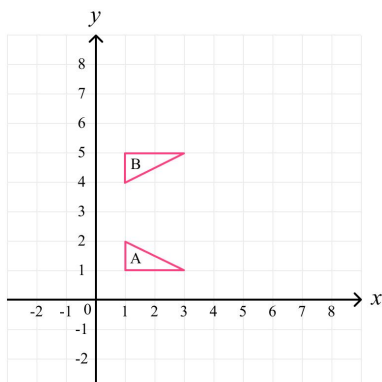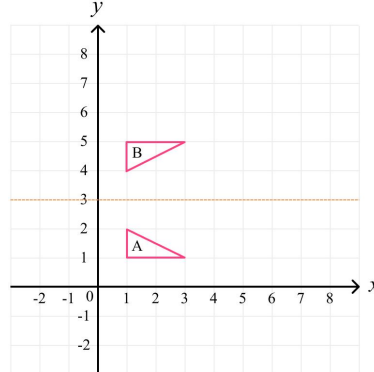Shape **B** is reflected in the line $y = 0$ to give shape **C**.

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

(3 marks)

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GCSE Exam Questions: Transformations Answers

	Question	Answer	Marks
1)	Explain why the two triangles are congruent.	Right angle, hypotenuse and one side are the same (RHS)	**(1)**
2)	Triangles *ABC* and *DEF* are two similar isosceles triangles where $AC = k \times EF$. Work out the value of *x*	$10.5 \div 7 = 1.5$ $x = 5 \times 1.5 = 7.5 \ cm$	**(1)** **(1)**
3) (a)	Enlarge the shape with scale factor 2, centre (0,0).	For one correct vertex For second correct vertex All three correct vertices	**(1)** **(1)** **(1)**
(b)	Describe fully the single transformation that maps shape **A** onto shape **B**.	Reflection $y = 3$	**(1)** **(1)**

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GCSE Exam Questions: Transformations Answers

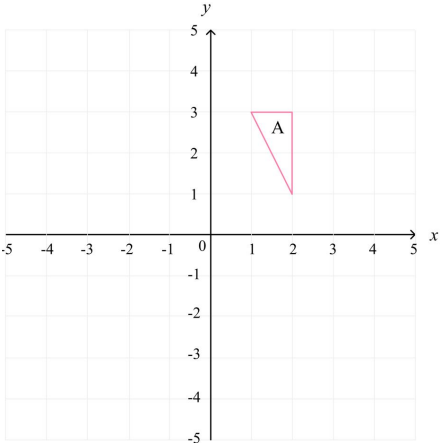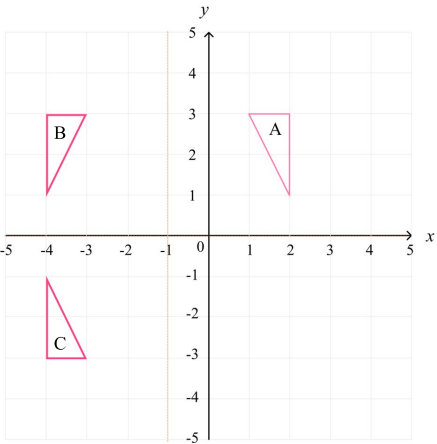|	Question	Answer	Marks
4)	Shape **A** is reflected in the line $x = -1$ to give shape **B**. Shape **B** is reflected in the line $y = 0$ to give shape **C**. Describe fully the single transformation that maps shape **A** onto shape **C**. 	 Rotation 180° Centre (- 1, 0)	**(1)** **(1)** **(1)**

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