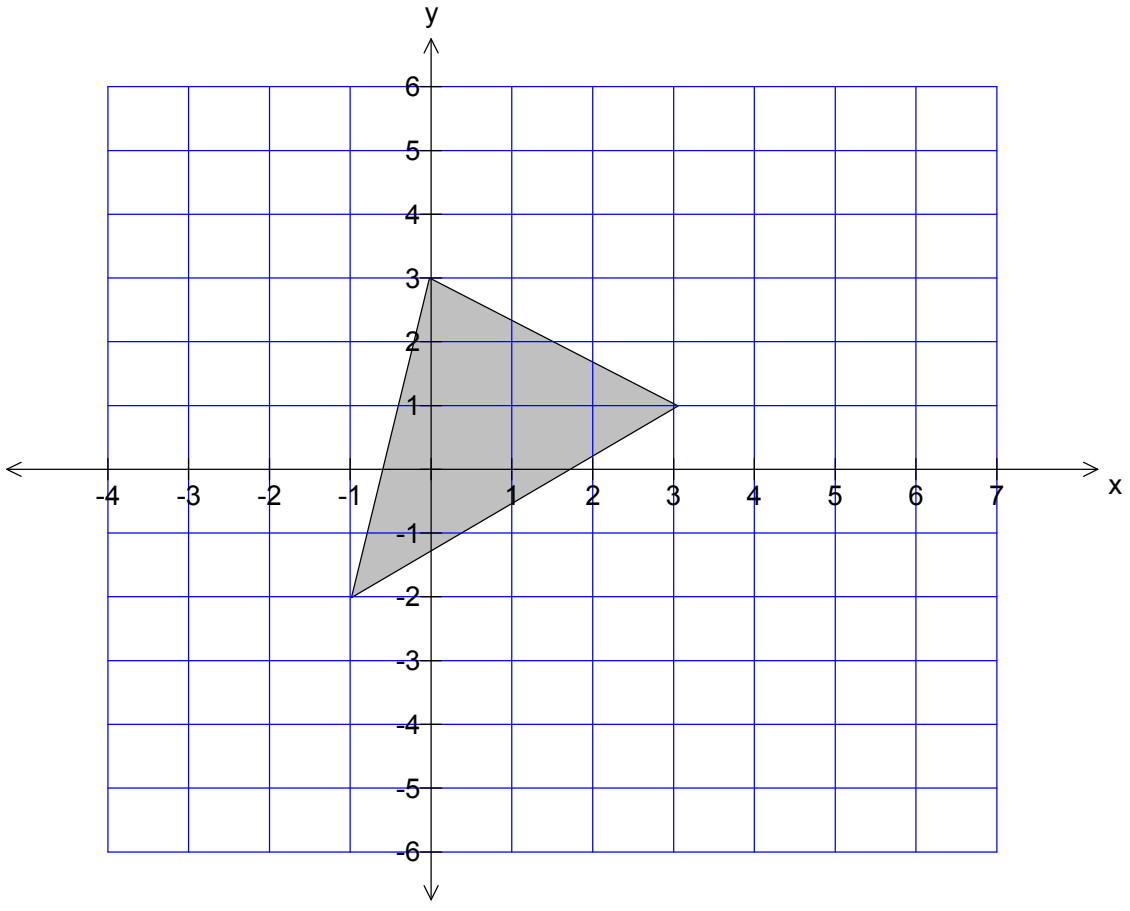
GCSE Transformations 1:

Assessment B

Your Name:	**Tutor Group:**
End of GCSE target grade:	**Grade achieved:**

Grade D objectives	☺	😐	☹
• I can translate, rotate and reflect a shape.			
• I can enlarge a shape by a positive whole number scale factor.			

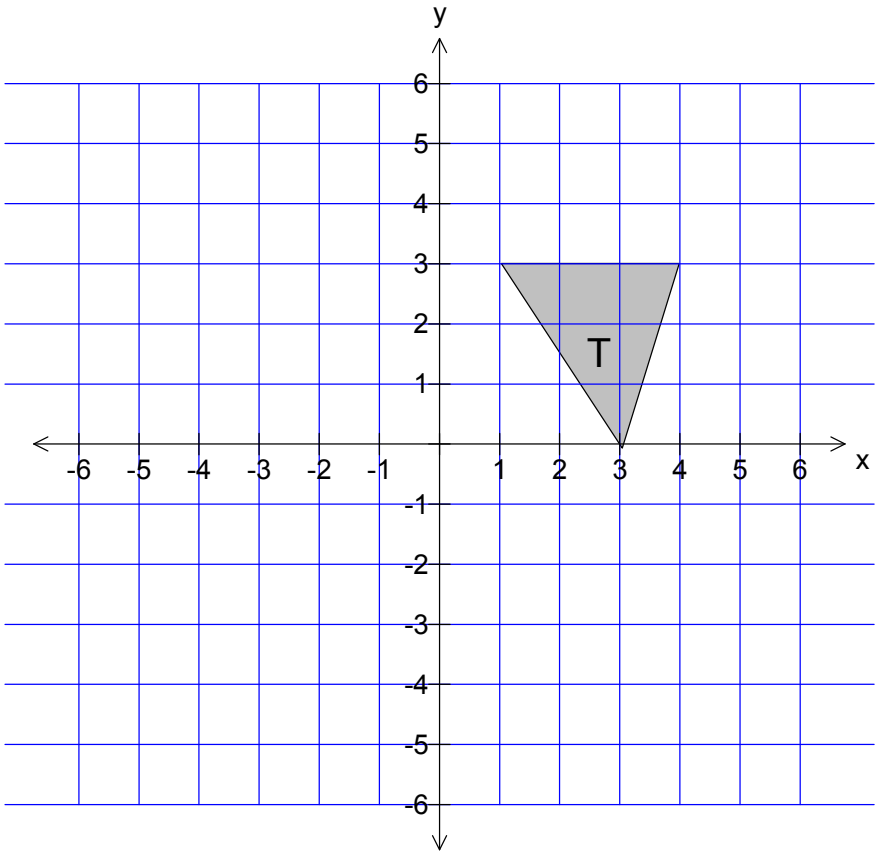
1.



[3]

Enlarge the shaded triangle by a scale factor 2, centre (1, 1).

2



Triangle **T** has been drawn on the grid.

(a) Reflect triangle **T** in the line $y = -1$.
Label the new triangle **A**. [2]

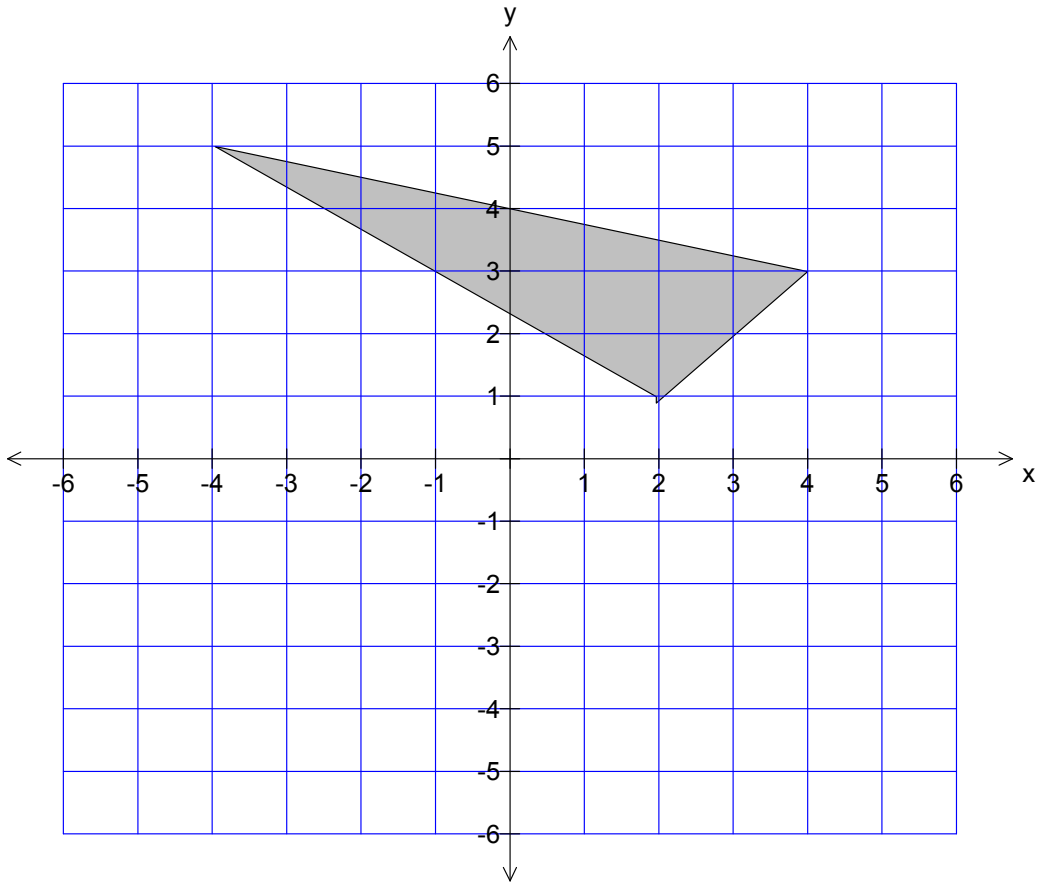
(b) Rotate triangle **T** through 90° anticlockwise, centre O.
Label the new triangle **B**. [2]

(c) Translate triangle **T** using the translation vector $\begin{pmatrix} -1 \\ 3 \end{pmatrix}$.

Label the new triangle **C**. [2]

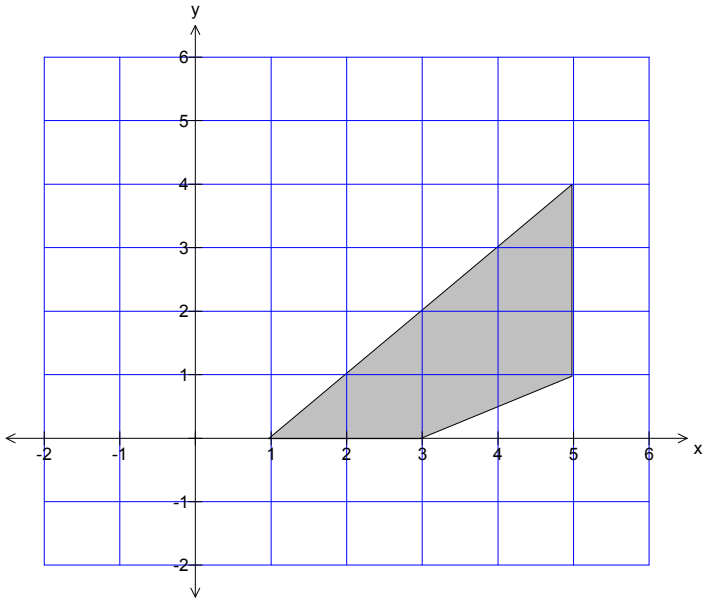
Grade C objectives	☺	😐	☹
• I can enlarge a shape with a fractional scale factor			
• I can describe a single transformation fully.			
• I can reflect in diagonal mirror lines			

3.



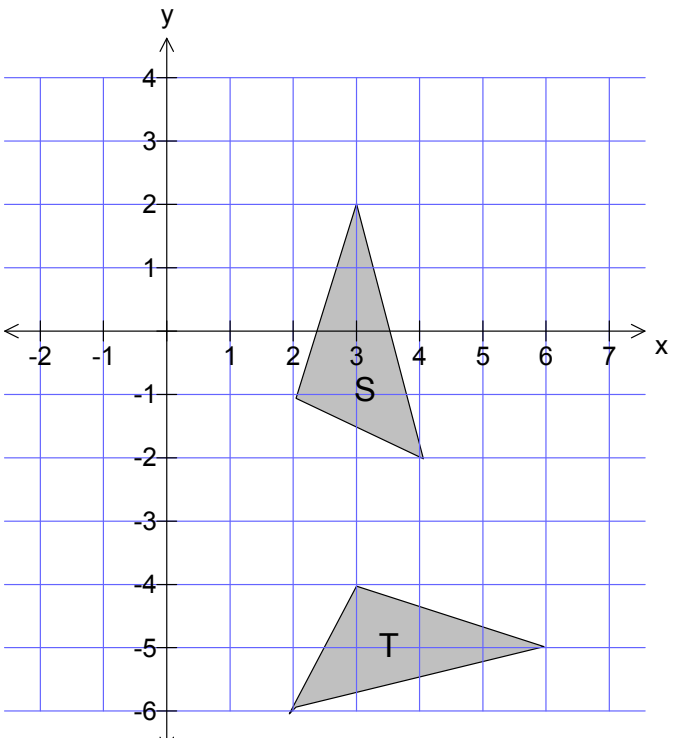
Enlarge the shaded triangle using a scale factor of ½, centre (0, -3). [2]

4.



Reflect the shaded quadrilateral in the line $y = x$. [2]

5.



Describe the **single** transformation that maps triangle S onto triangle T.

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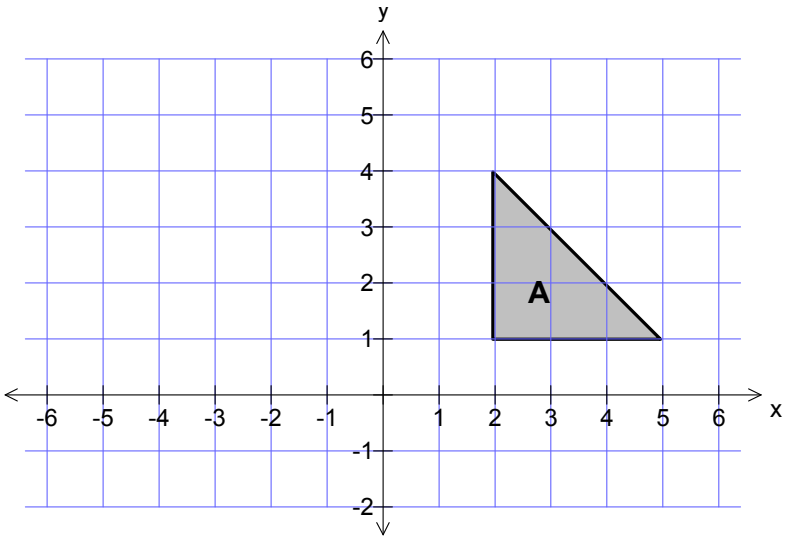
..... [3]

Grade B objectives	☺	😐	☹
• I can find a single transformation that has the same effect as a combination of 2 transformations.			

6.



Triangle A is rotated 180° about the point (1, 2) to give triangle B.
Triangle B is then reflected in the line $y = 2$ to give triangle C.

Describe the single transformation that takes triangle A to triangle C.

..... [2]

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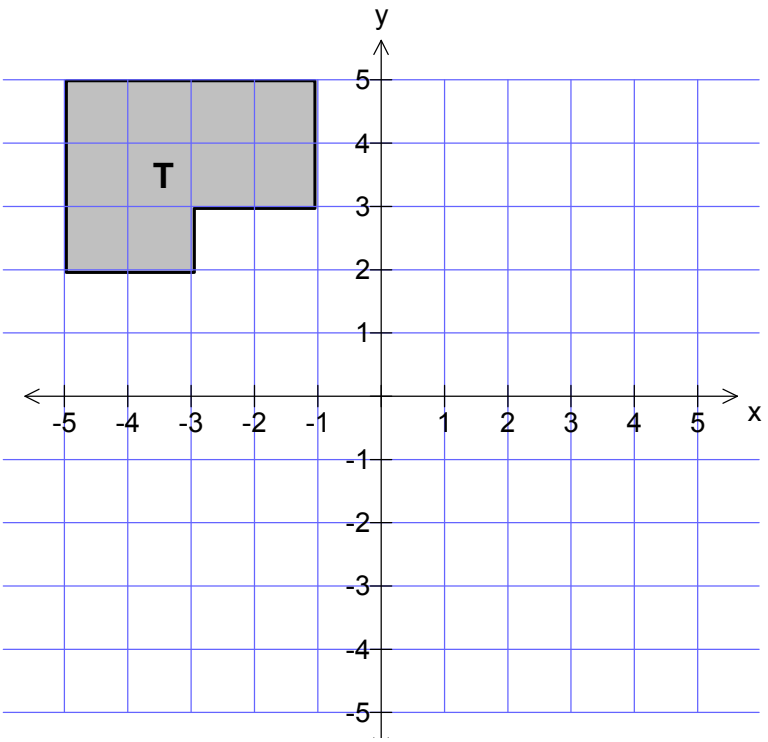
Grade A objectives	☺	😐	☹
• I can enlarge a shape with a negative scale factor			
• I can recognise and apply transformation of graphs, such as those represented by: y = f(x) + a, y = f(ax), y = f(x+a), y = f(-x), y = -f(x) and y = af(x)			

7.



Enlarge shape **T** by scale factor – 1.5 with centre of enlargement (–1,1). [2]

Teacher feedback:

In order to get to the next grade (or in order to improve the quality of your work) you should…

The following aspect of your work was particularly good …