



**Bishops  
Online  
Tutoring**



Education Consultancy

# **Edexcel GCSE Mathematics**

## **ENLARGEMENT: NEGATIVE SCALE FACTOR**

### **Materials Required:**

- Pen
- HB Pencil
- Ruler (in centimetres and millimetres)
- Protractor
- Compass

### **Instructions:**

- Use a black ink pen to answer all questions
- Fill your name in the section below
- Answer the questions in the spaces provided
- Show your working out for all answers

### **Information:**

- The marks allocated for each question are displayed within brackets – utilise this information to gauge the appropriate amount of time to dedicate to each question
- Questions marked with an asterisk (\*) will assess your written communication; be careful of spelling, punctuation and grammar with these questions

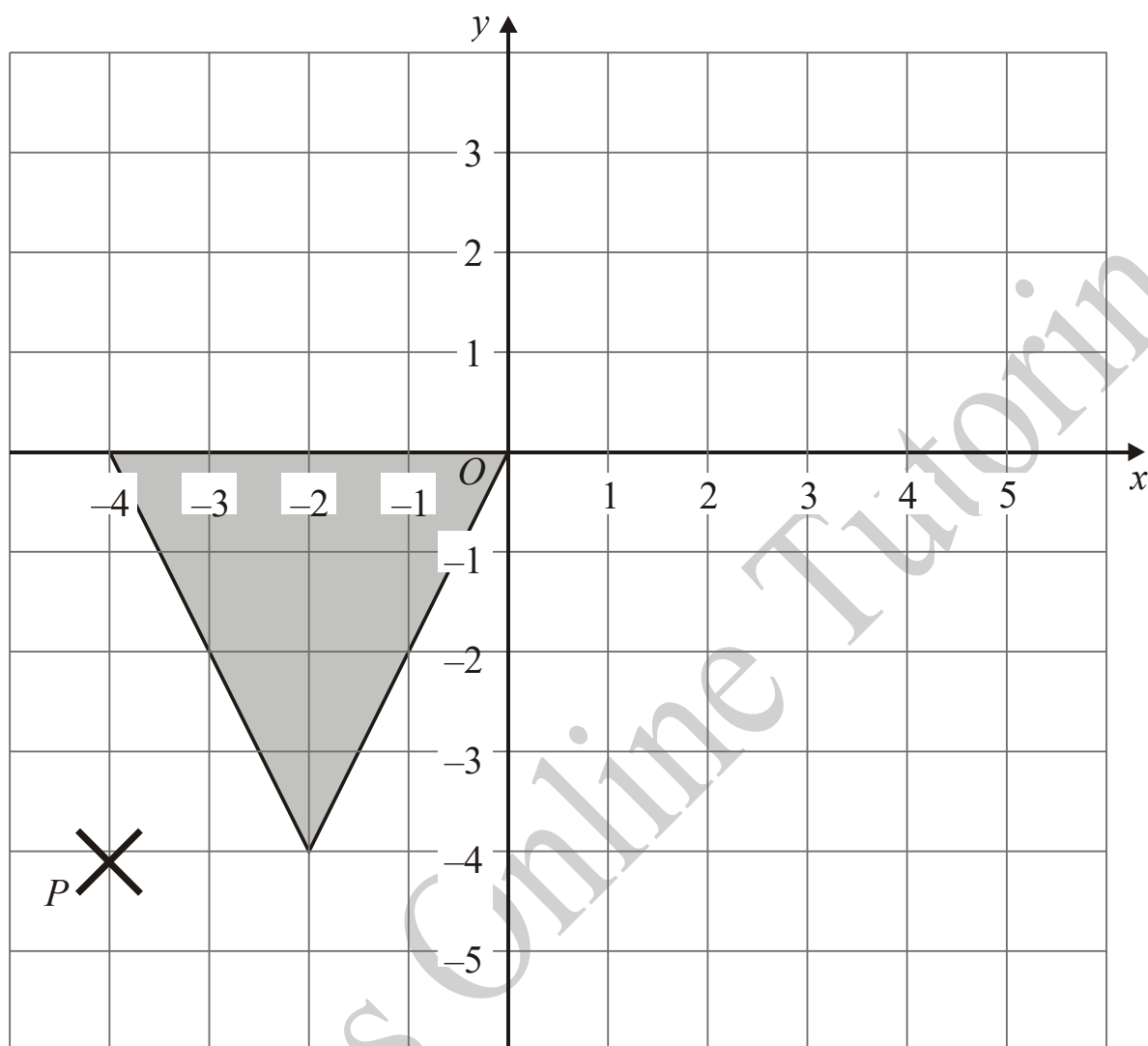
### **Advice:**

- Carefully read the question before attempting to answer it
- Be vary of time and try to answer every question
- If you have enough time in the end, go back and check your answers. A good way to check your answers is to retry the question with the hope of getting the same answer as before without looking at your working out from before

# **NO CALCULATOR ALLOWED**

**NAME:**

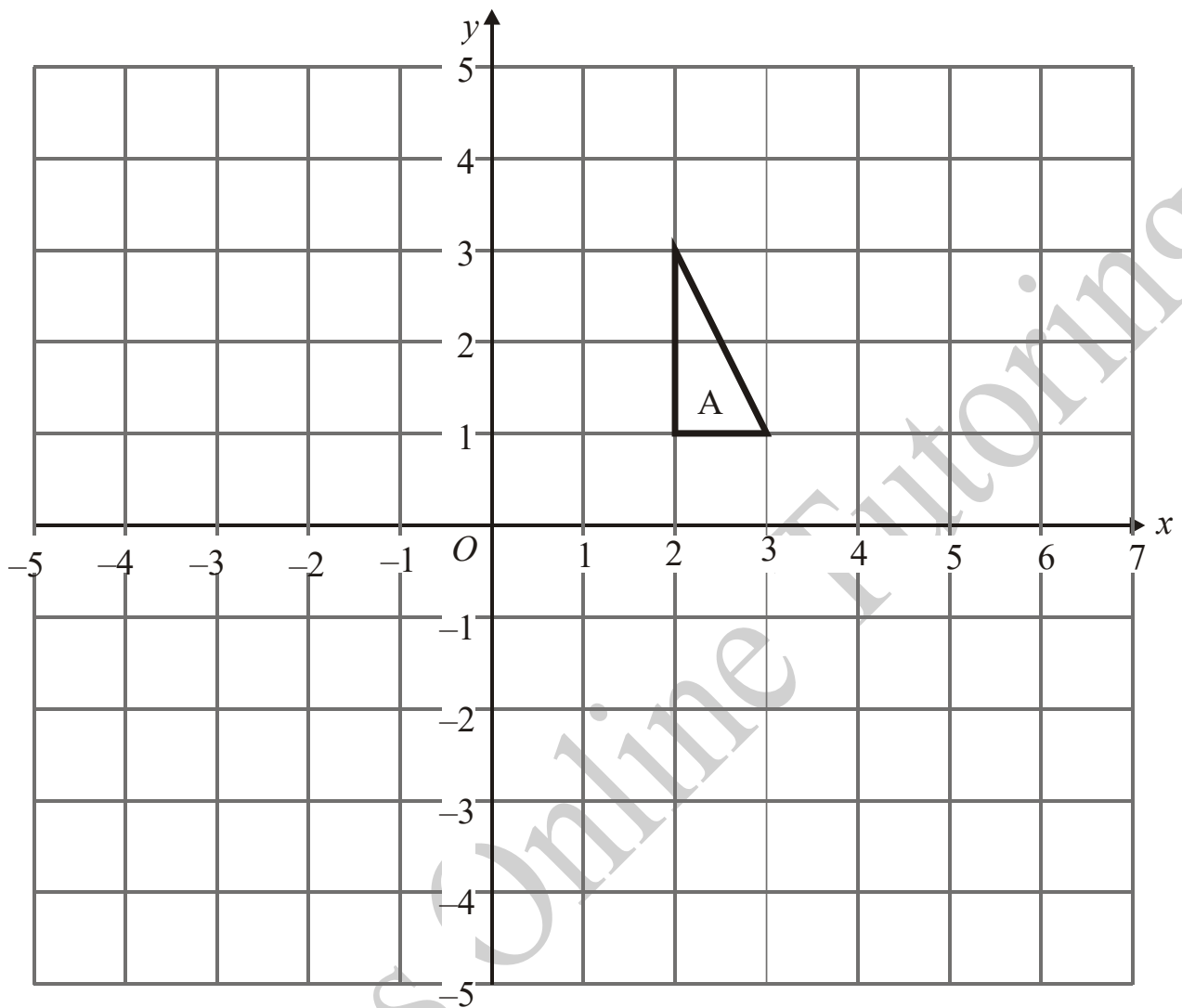
1.



Enlarge the shaded triangle by a scale factor  $1\frac{1}{2}$ , centre  $P$ .

(Total 3 marks)

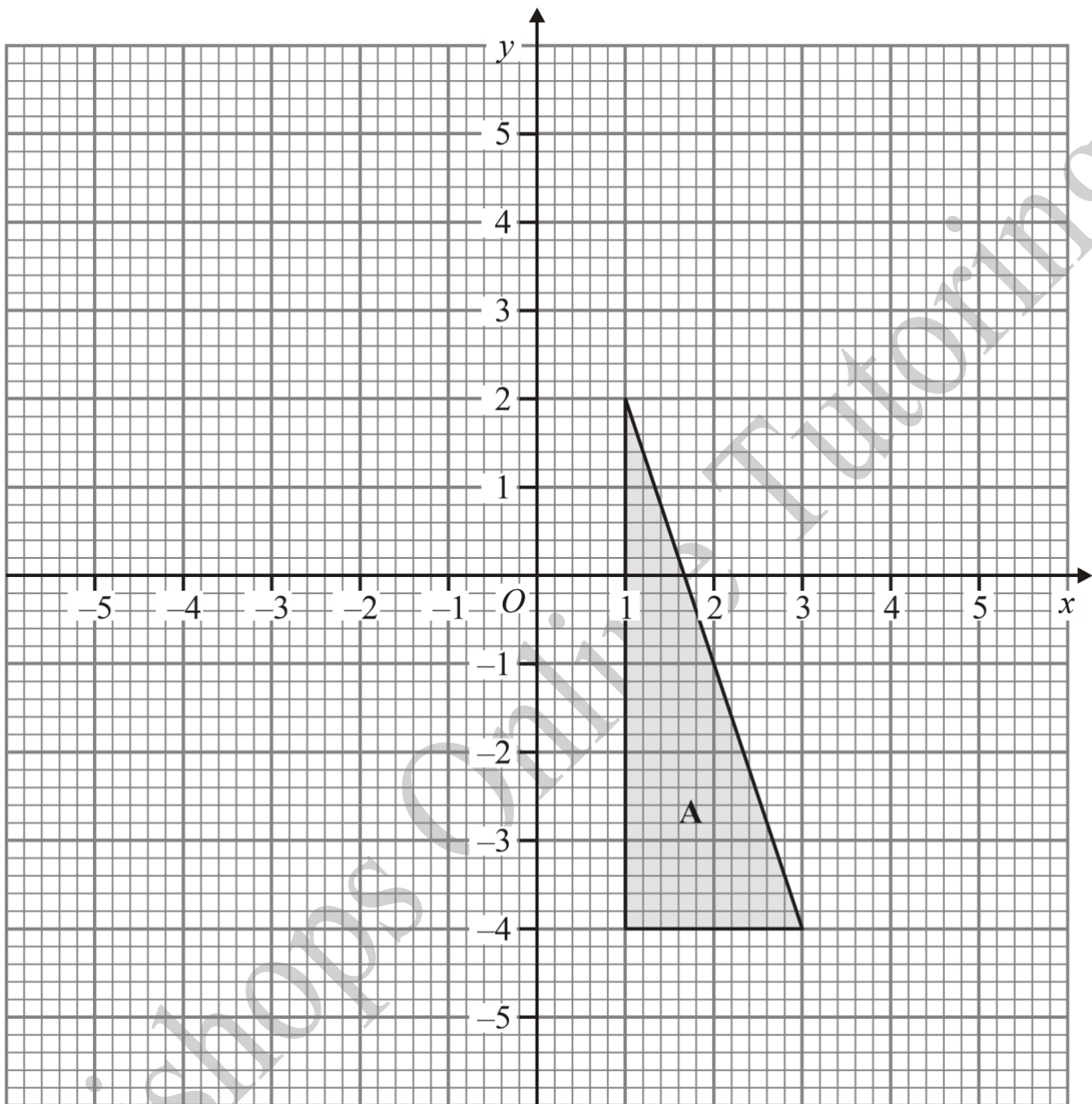
2.



Enlarge triangle A by scale factor  $-1\frac{1}{2}$ , centre O.

(Total 3 marks)

3.

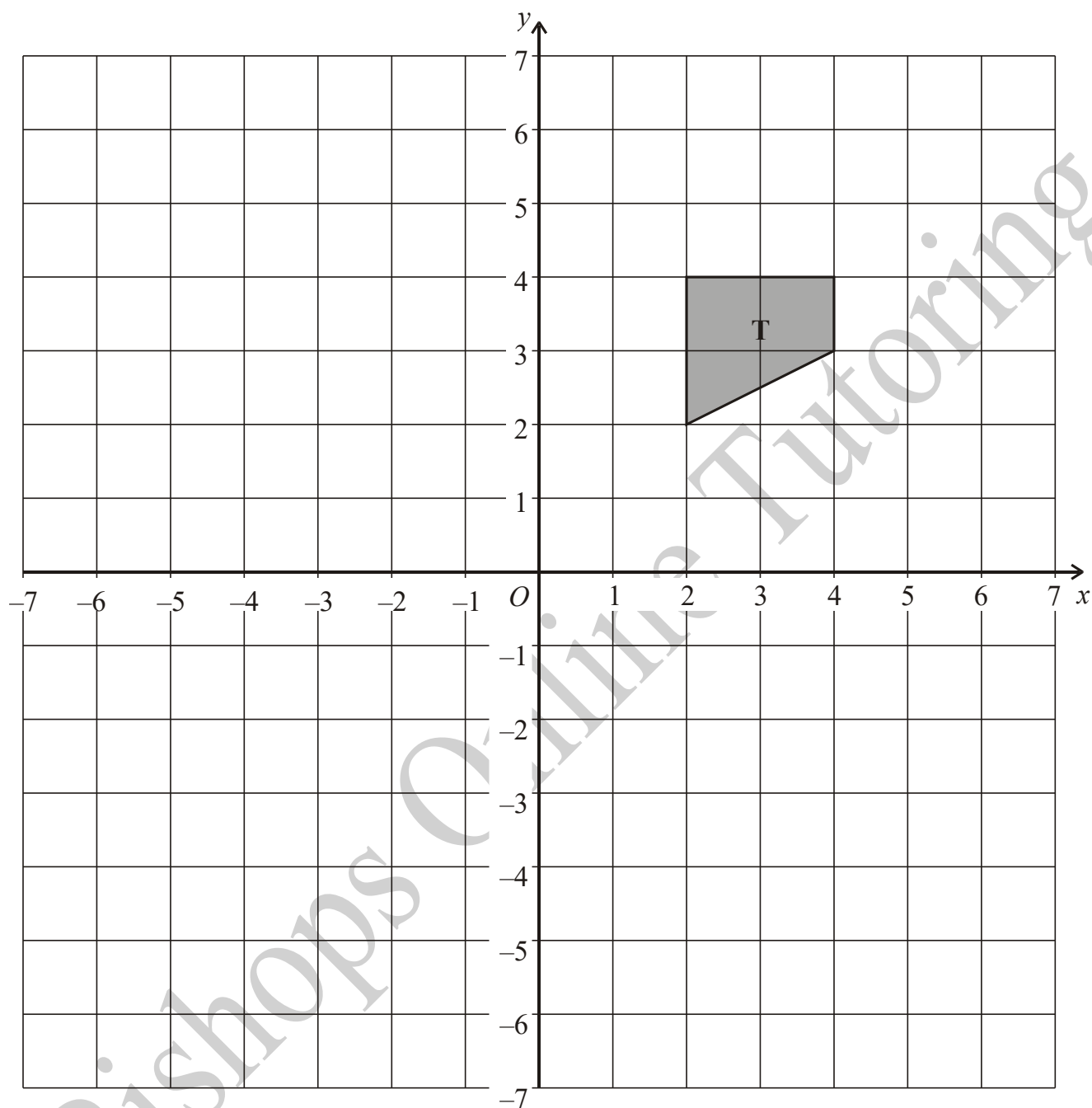


Enlarge triangle **A** by scale factor  $-\frac{1}{2}$ , centre  $(-1, -2)$ .

Label your triangle **B**.

**(Total 3 marks)**

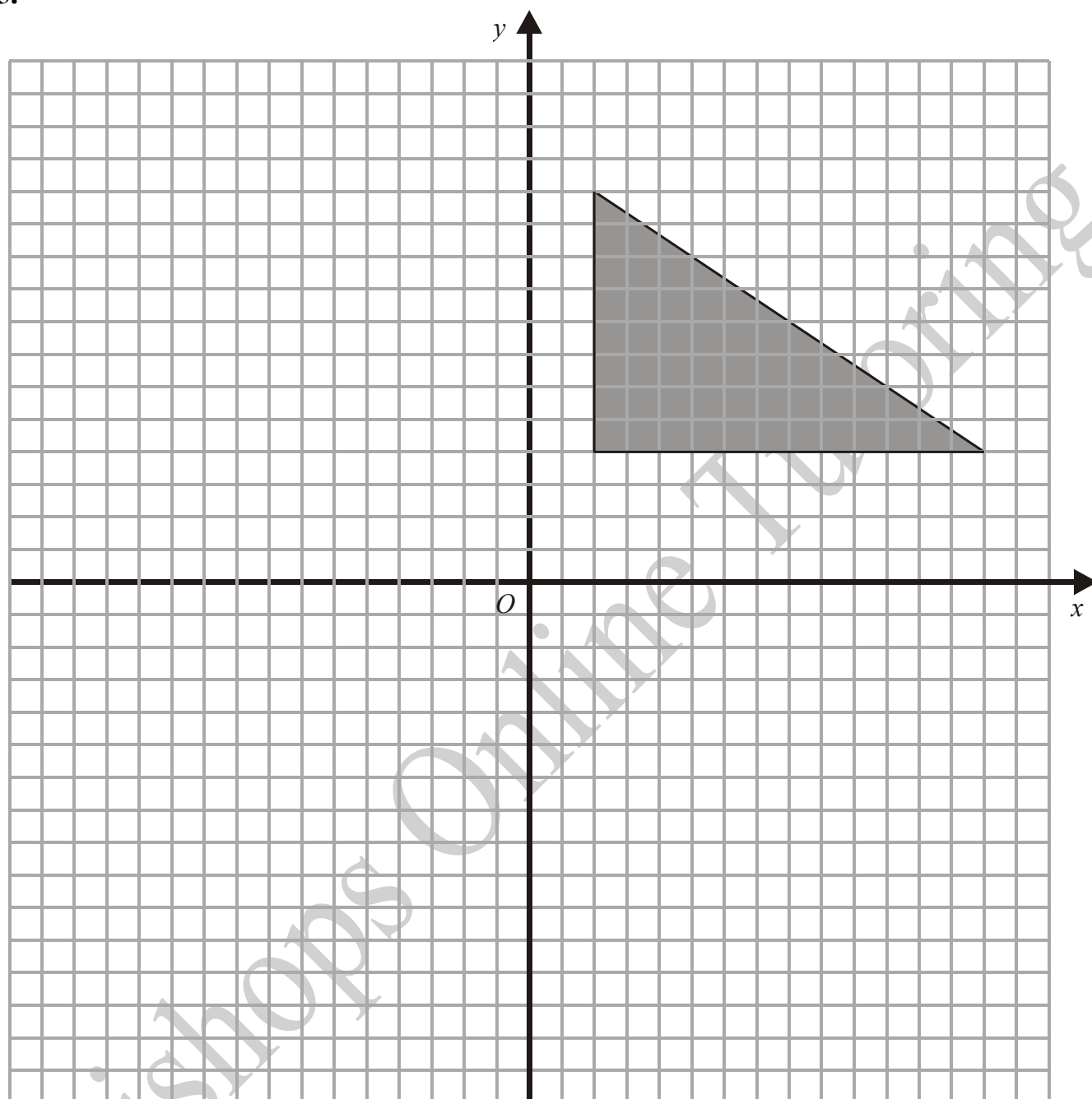
4.



Enlarge shape **T** with scale factor  $-1.5$ , centre  $(0, 2)$ .

**(Total 3 marks)**

5.

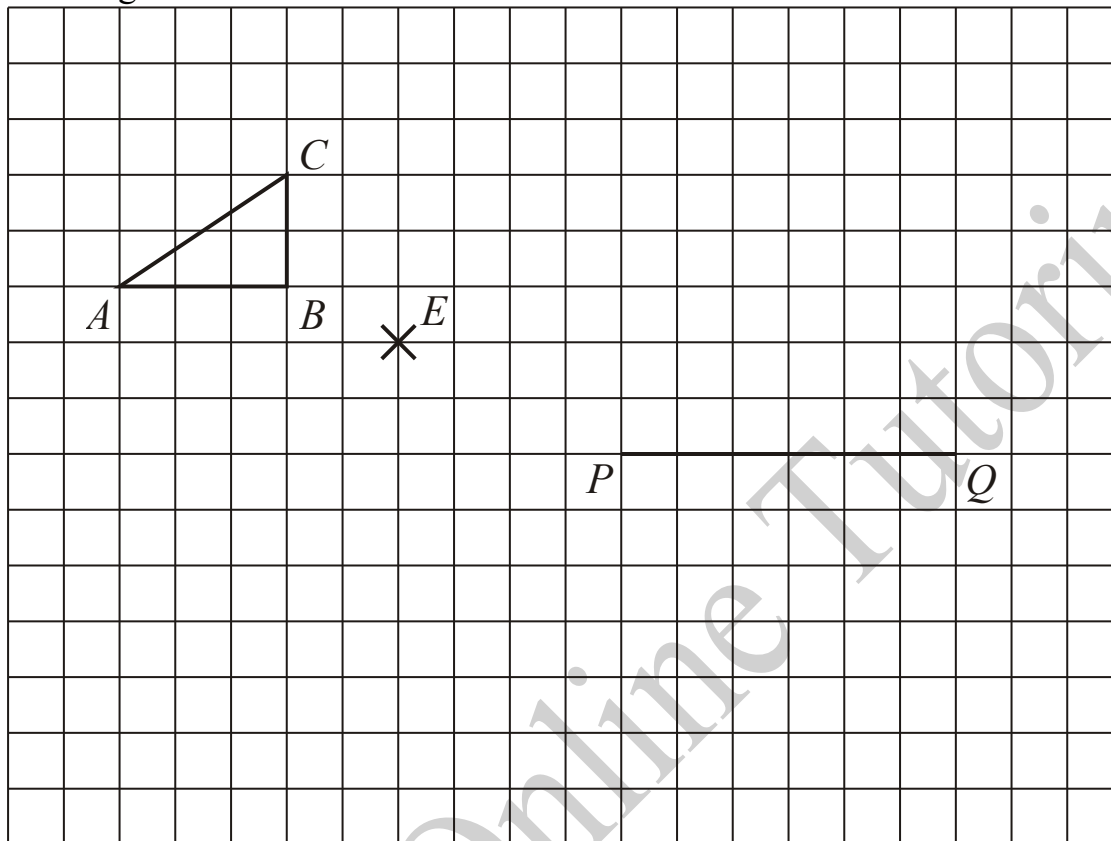


Enlarge the triangle by a scale factor of  $-\frac{1}{2}$ , centre  $O$

**(Total 2 marks)**

6.

The triangle  $ABC$  is to be enlarged, using  $E$  as the centre, to give the triangle  $PQR$ . The line  $PQ$  is the image of the line  $BA$ .



- (a) Write down the scale factor of the enlargement.

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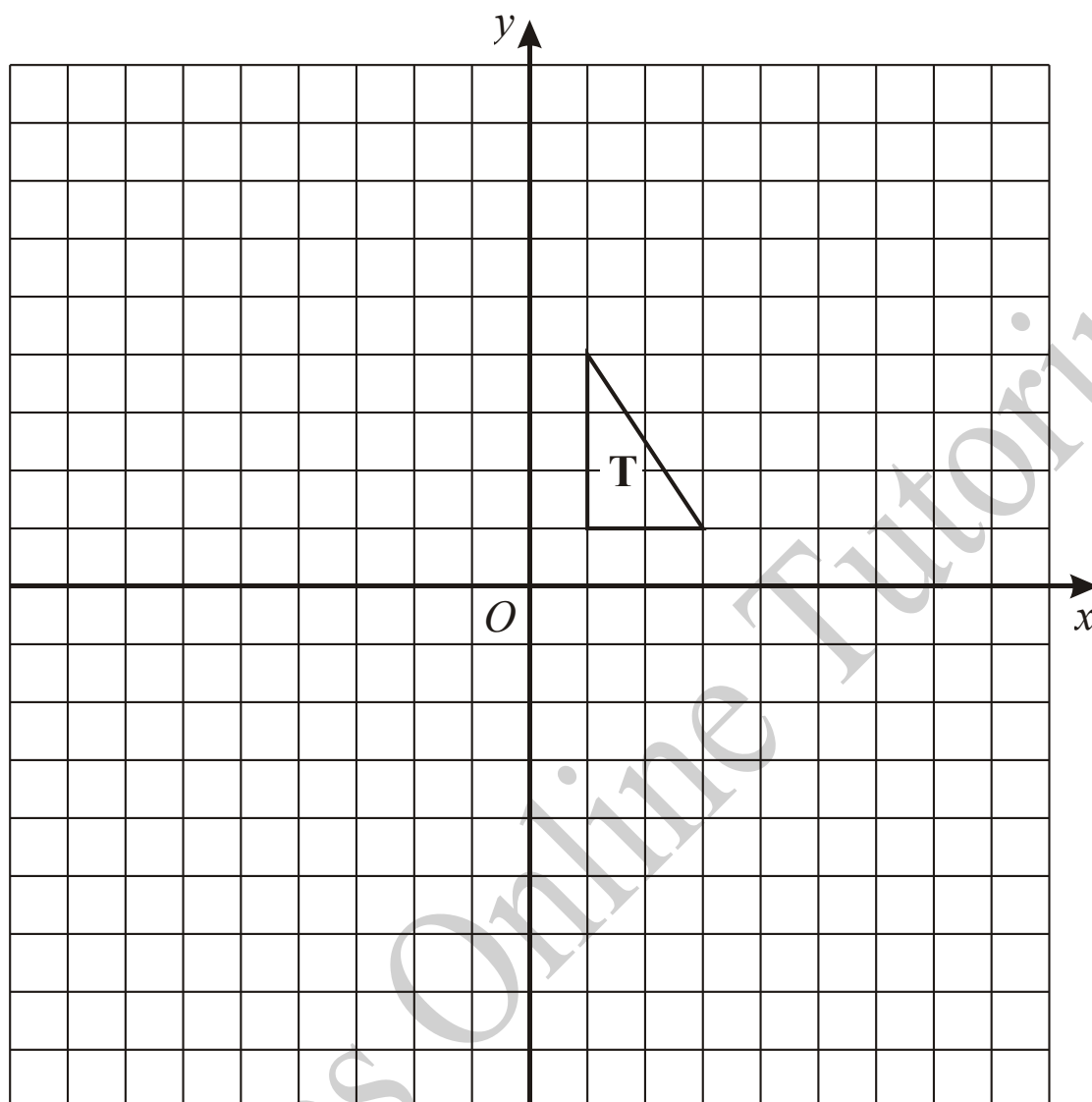
(1)

- (b) Complete the triangle  $PQR$ .

(1)

(Total 2 marks)

7.



Enlarge triangle  $T$ , scale factor  $-2$ , centre  $O$ .

(Total 2 marks)