

Name:.....

Total Marks:.....

# GCSE (9-1) Grade 6 Enlargement by Negative Scale Factor



## Instructions

Use **black** ink or ball-point pen.

**Fill in the boxes** at the top of this page with your name.

Answer **all** questions.

Answer the questions in the spaces provided

– there may be more space than you need.

**Show all your working out**

## Information

The marks for **each** question are shown in brackets.

use this as a guide as to how much time to spend on each question.

Questions labelled with an **asterisk** (\*) are ones where the quality of your written communication will be assessed

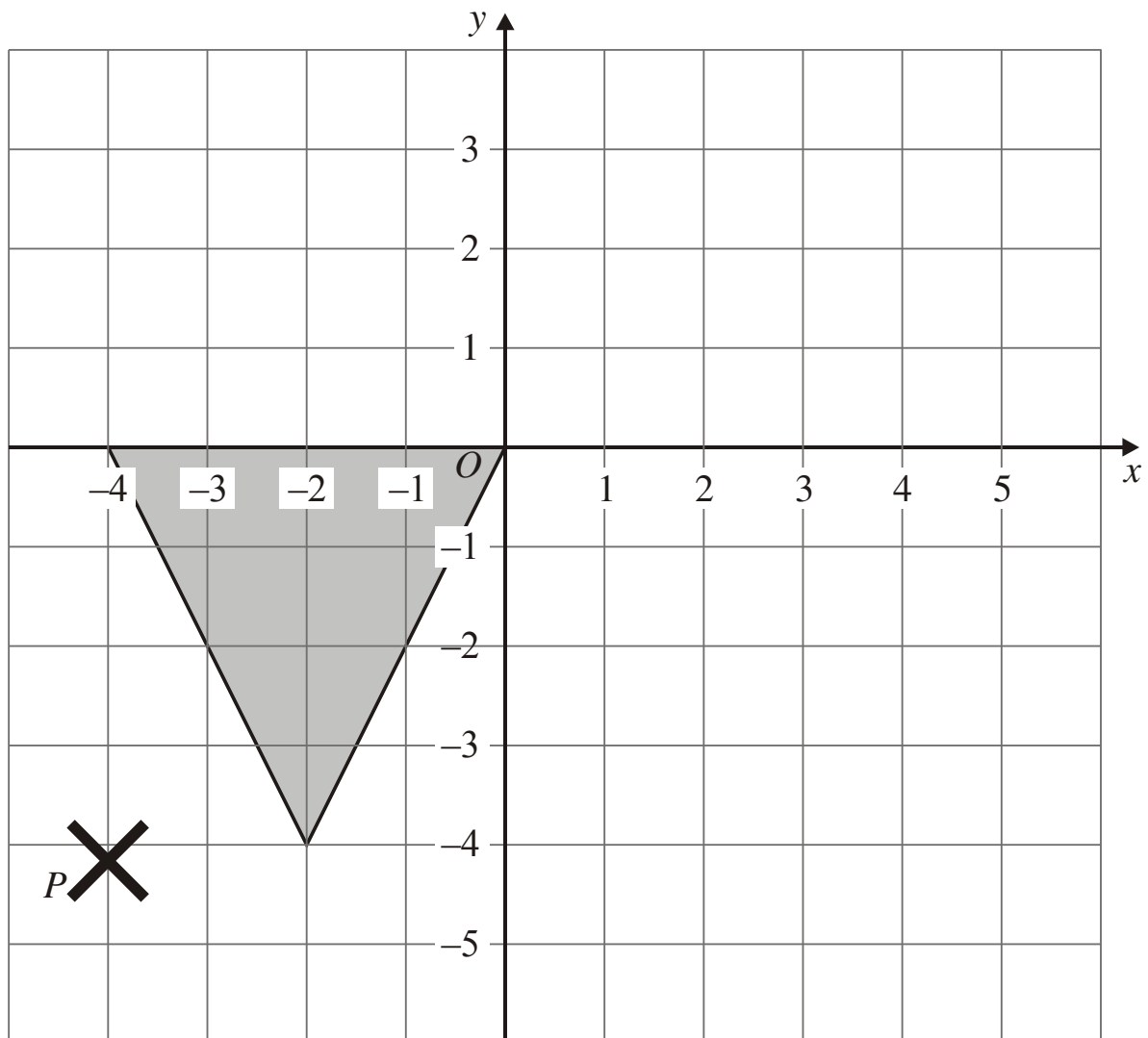
## Advice

Read each question carefully before you start to answer it

Attempt every question

Check your answers if you have time at the end

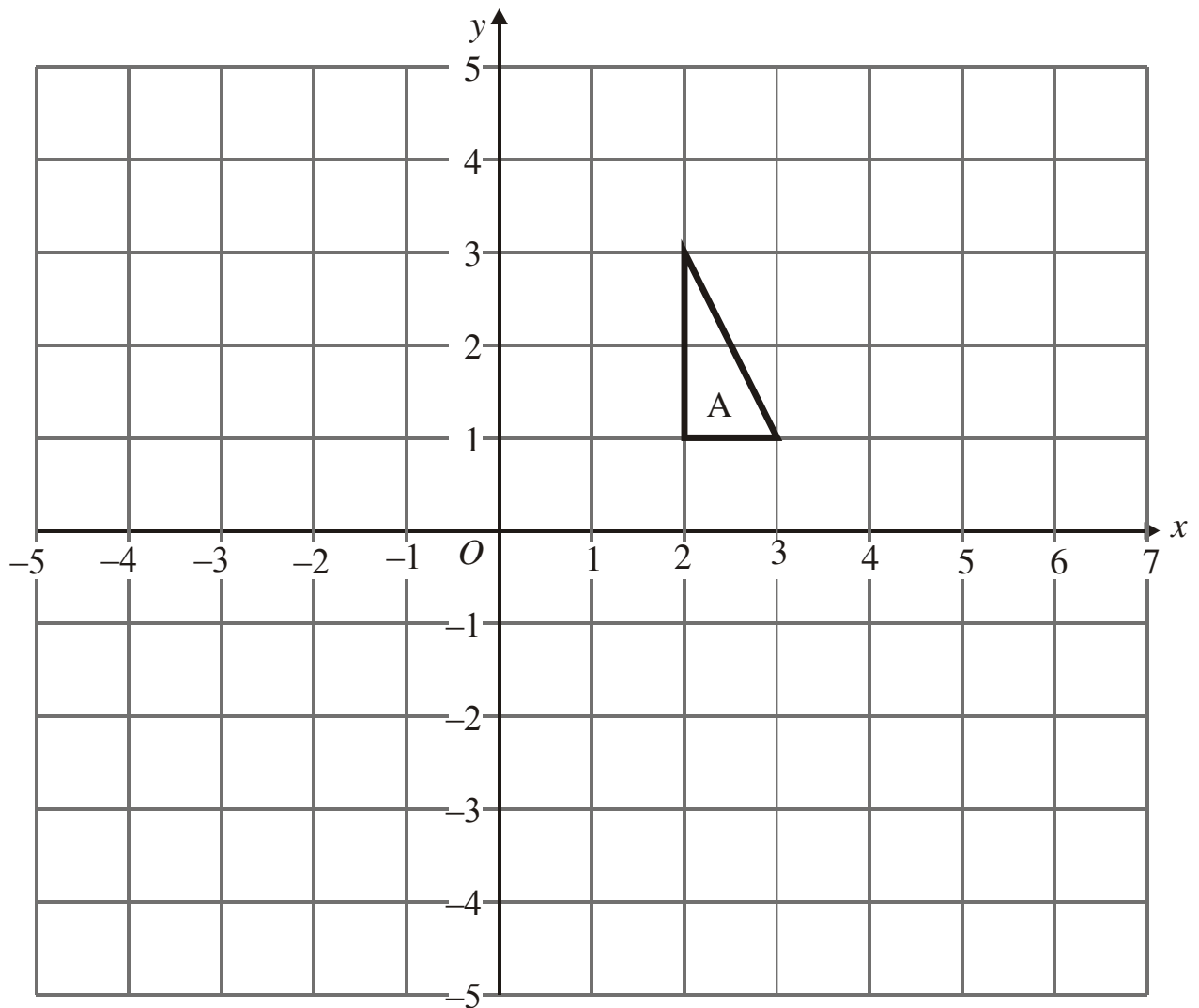
1.



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

**(Total 3 marks)**

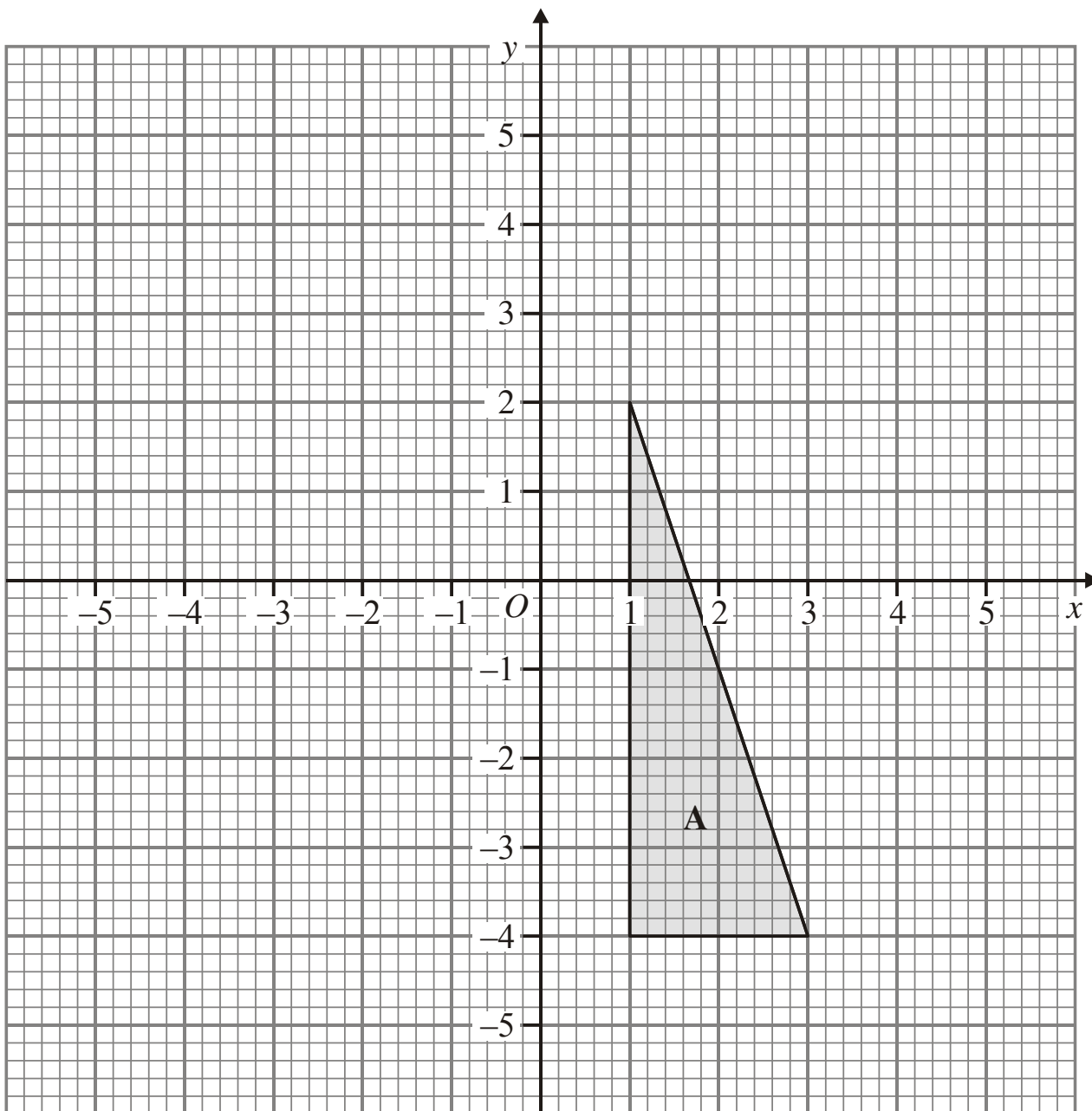
2.



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

**(Total 3 marks)**

3.

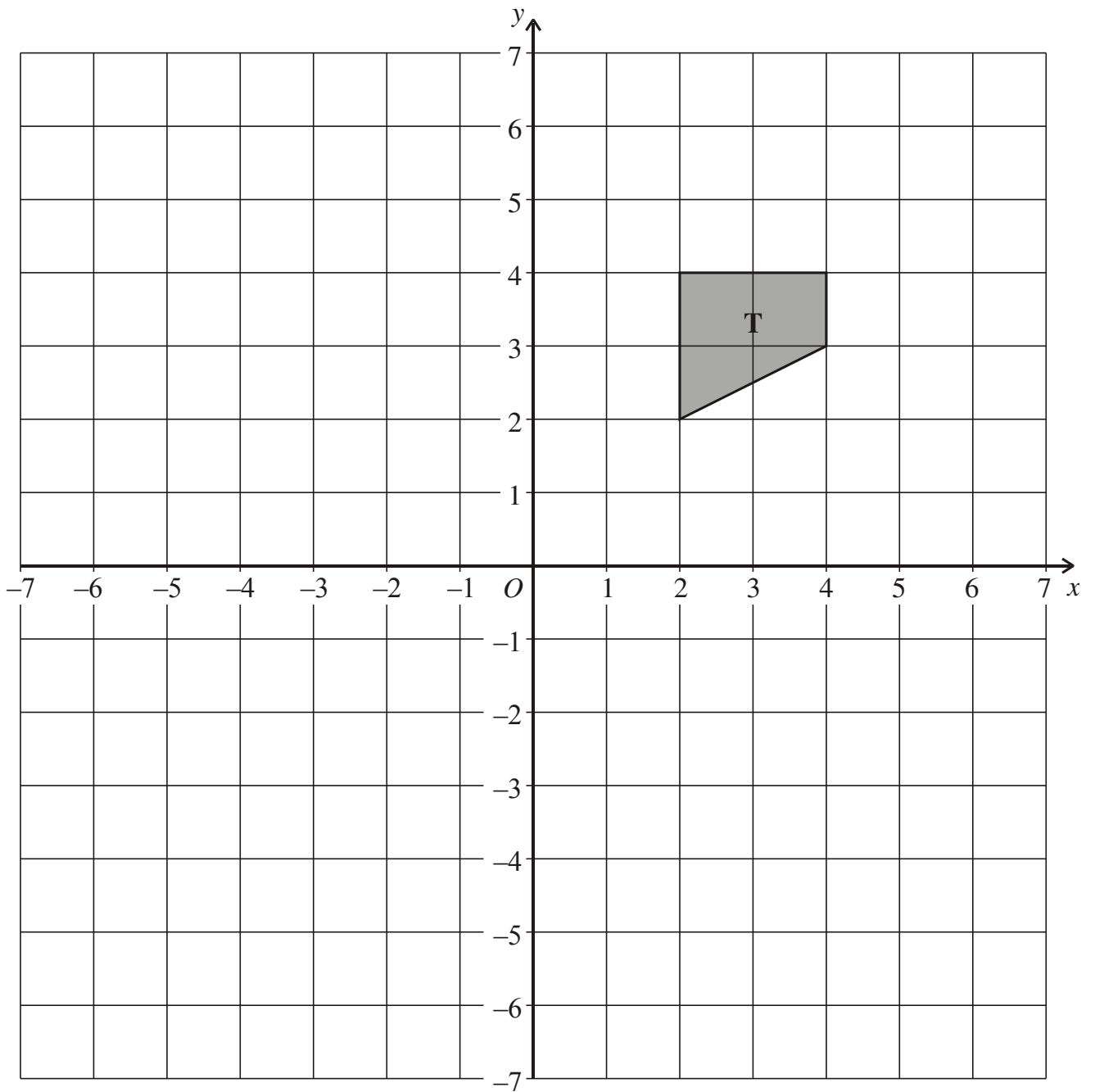


Enlarge triangle **A** by scale factor  $-\frac{1}{2}$ , centre  $(-1, -2)$ .

Label your triangle **B**.

**(Total 3 marks)**

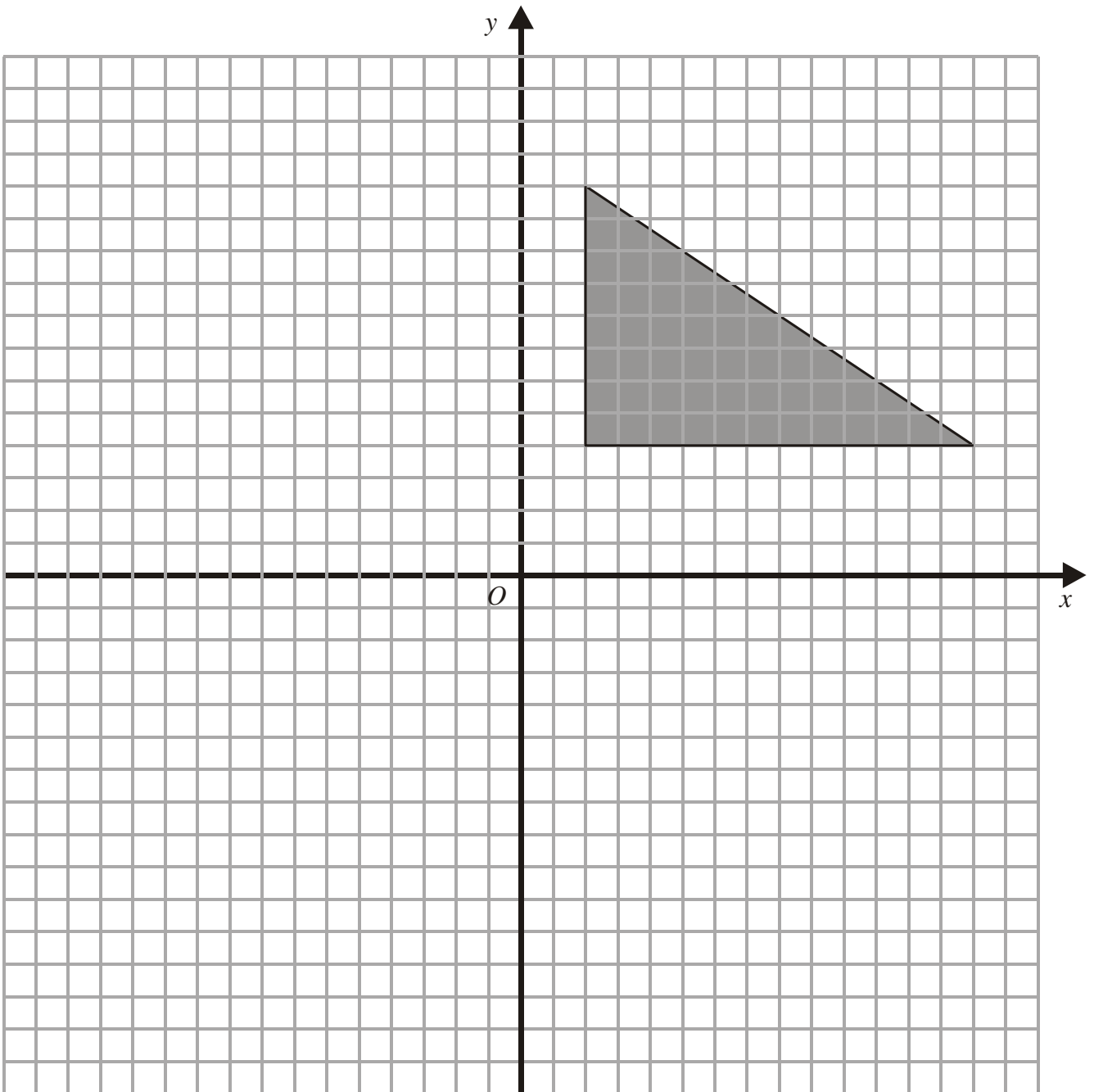
4.



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

**(Total 3 marks)**

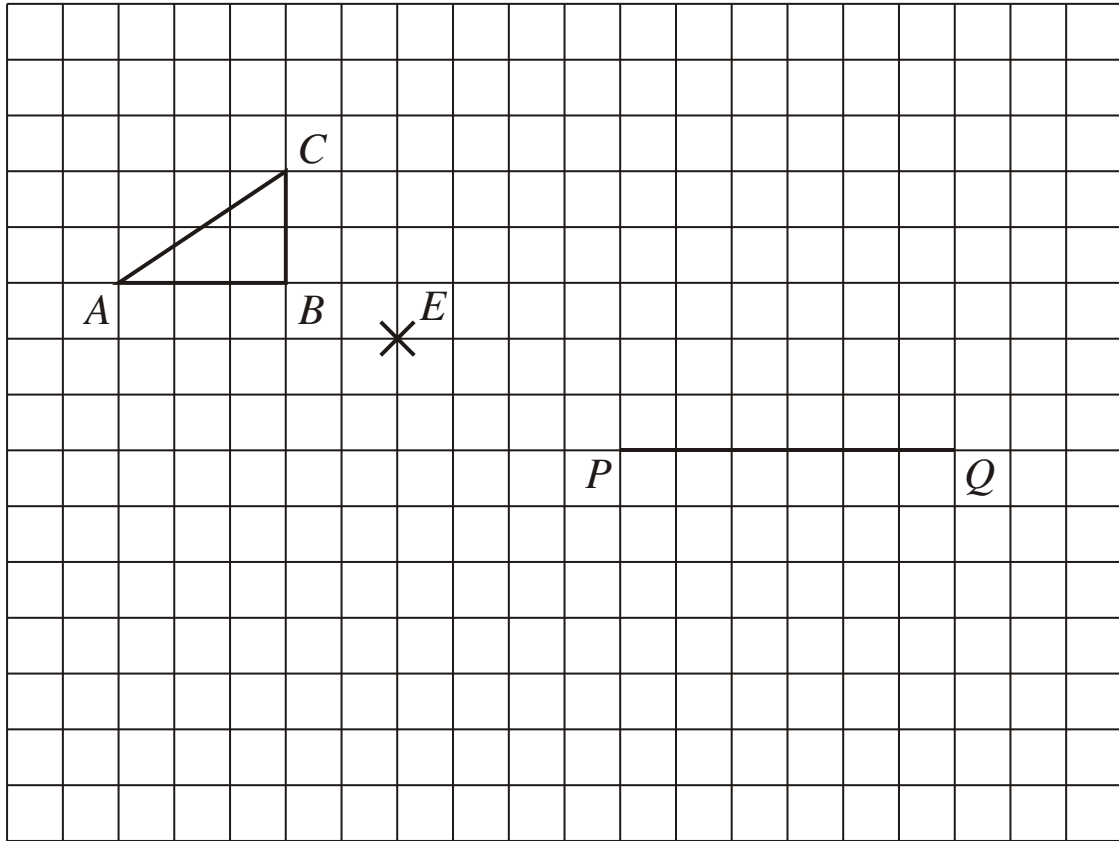
5.



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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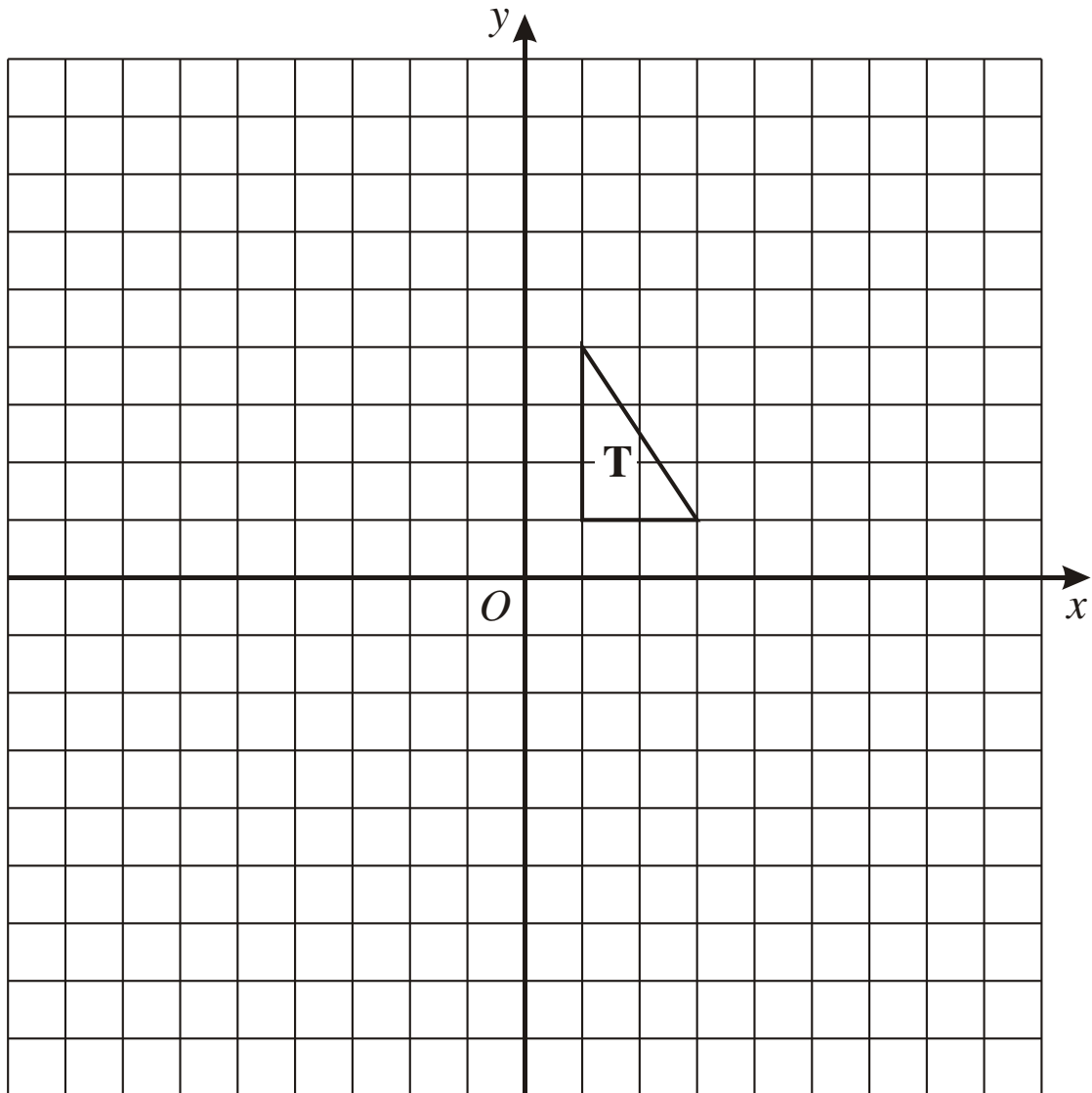
(1)

- (b) Complete the triangle  $PQR$ .

(1)

(Total 2 marks)

7.



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

**(Total 2 marks)**