

Name:

Exam Style Questions

Enlargements:

Negative Scale Factors



Corbettmaths

Equipment needed: Ruler, pencil and pen

### Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

[www.corbettmaths.com/contents](http://www.corbettmaths.com/contents)

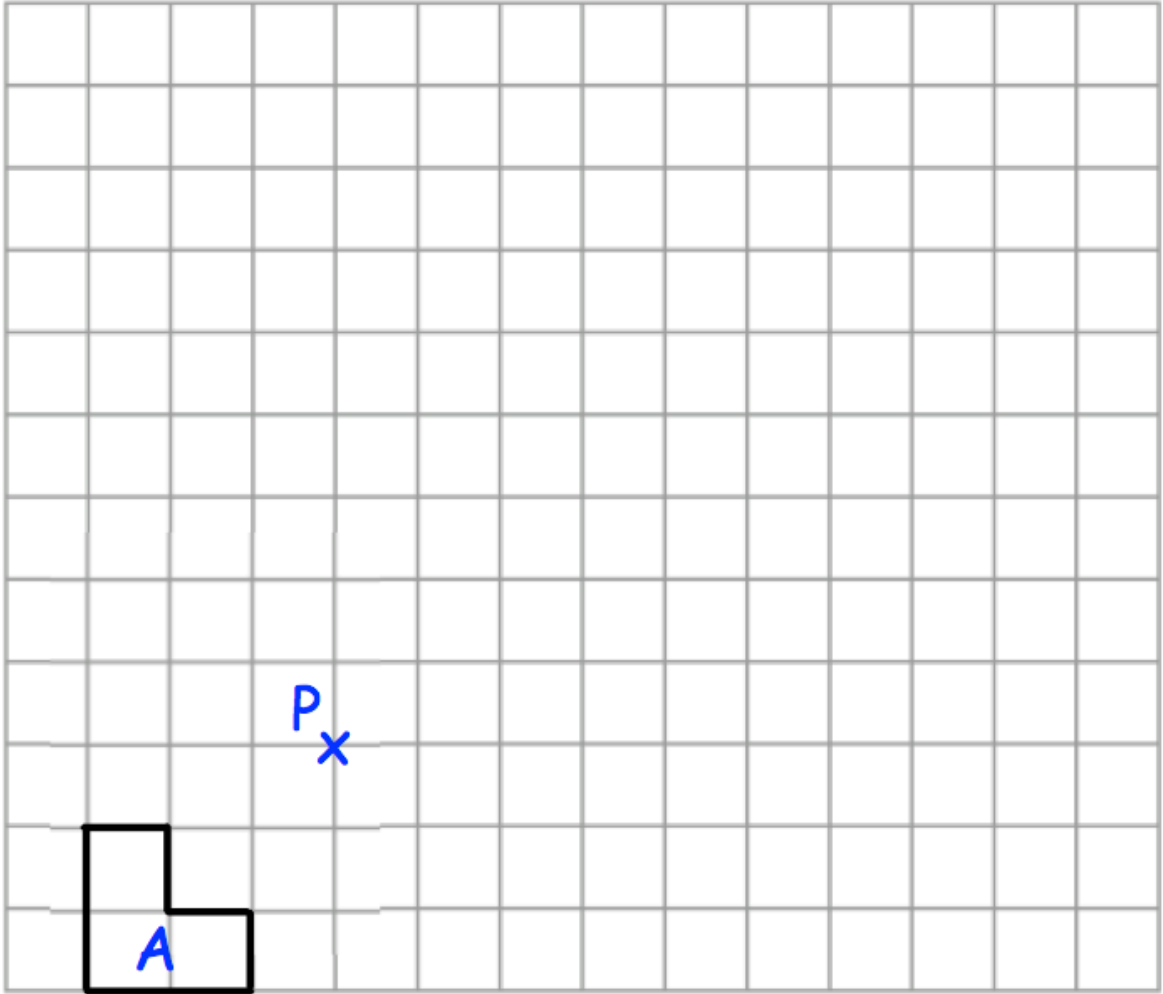
Video 108



Answers and Video Solutions



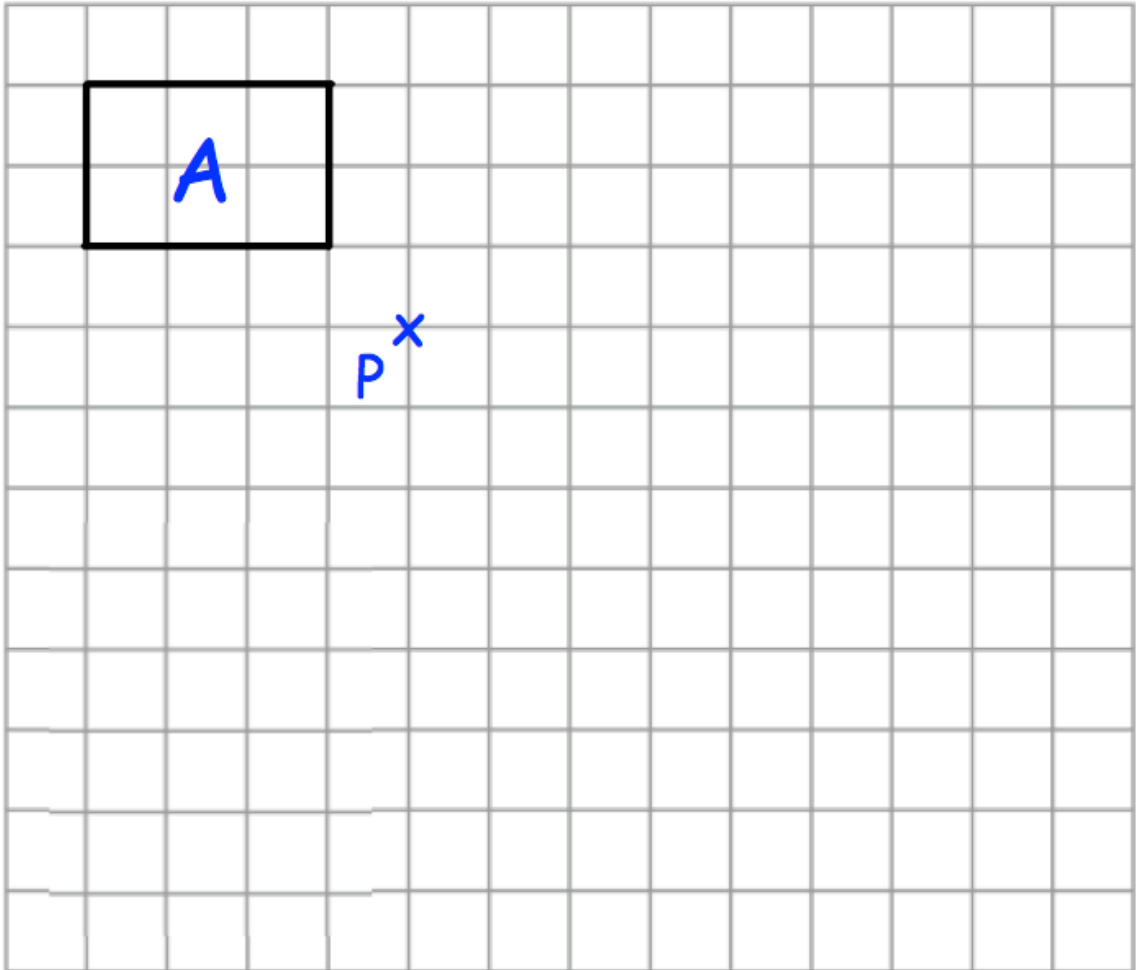
1.



Enlarge shape A by scale factor  $-3$ , using the point P as centre of enlargement.

(2)

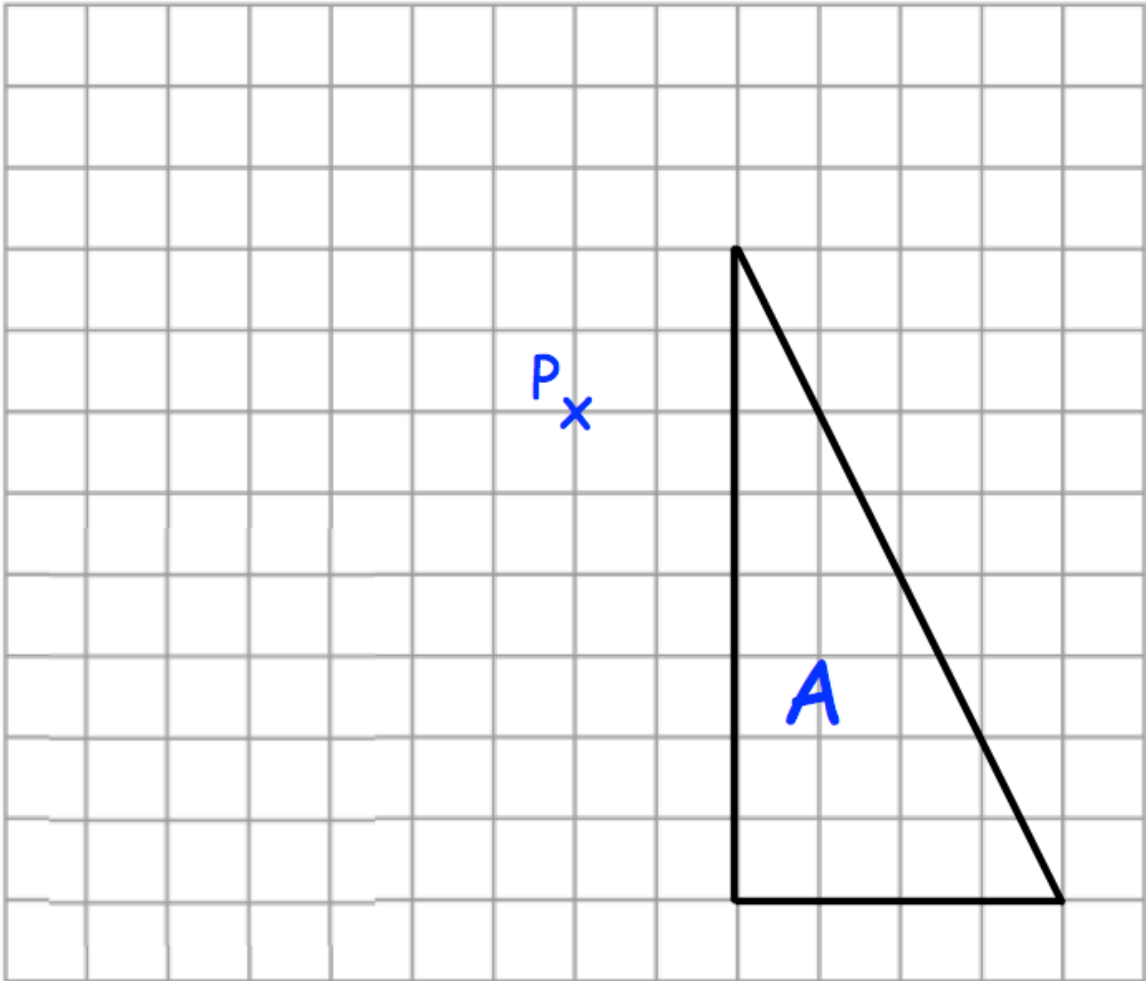
2.



Enlarge shape A by scale factor  $-2$ , using the point P as centre of enlargement.

(2)

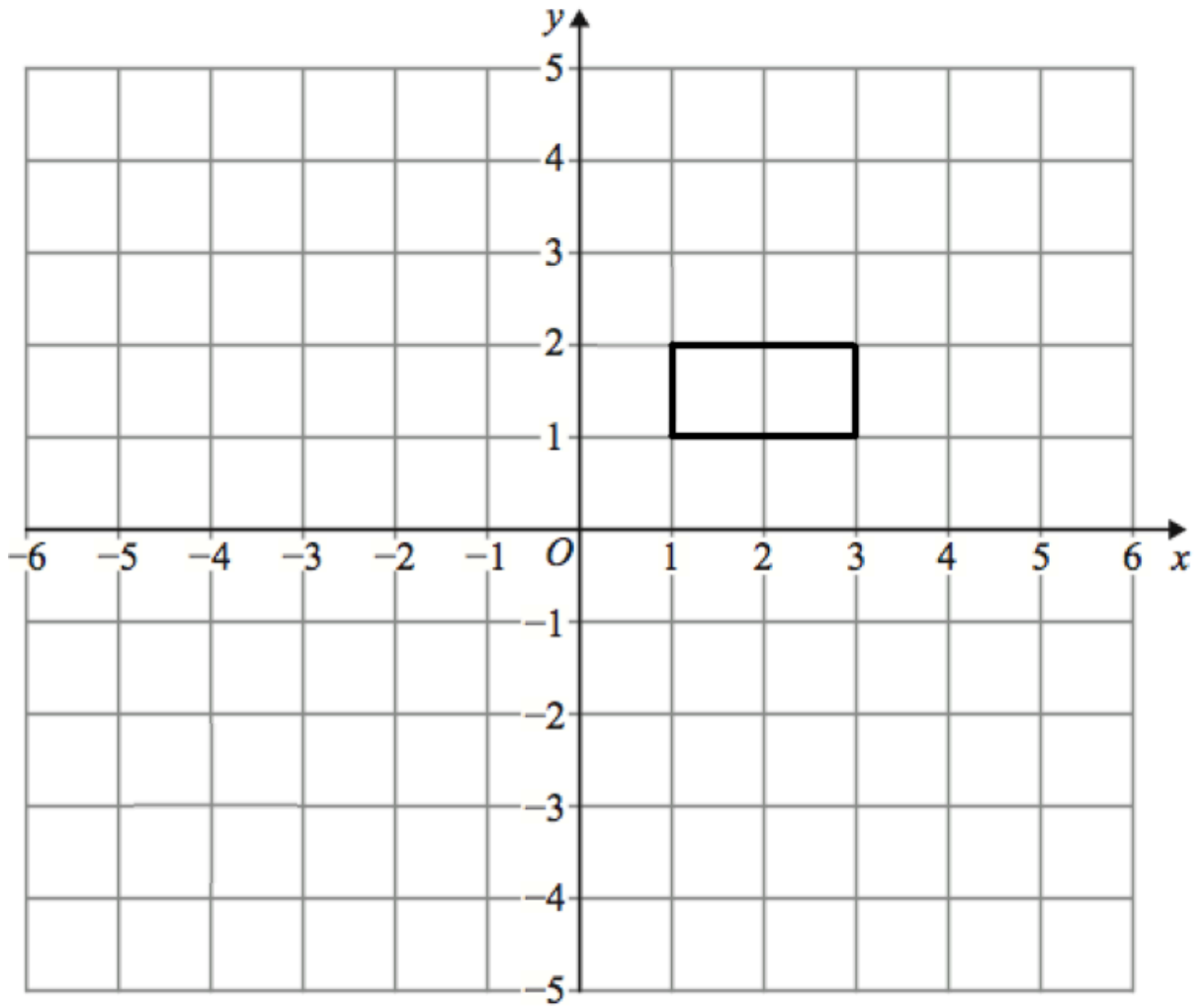
3.



Enlarge shape A by scale factor  $-\frac{1}{2}$  using the point P as centre of enlargement.

(2)

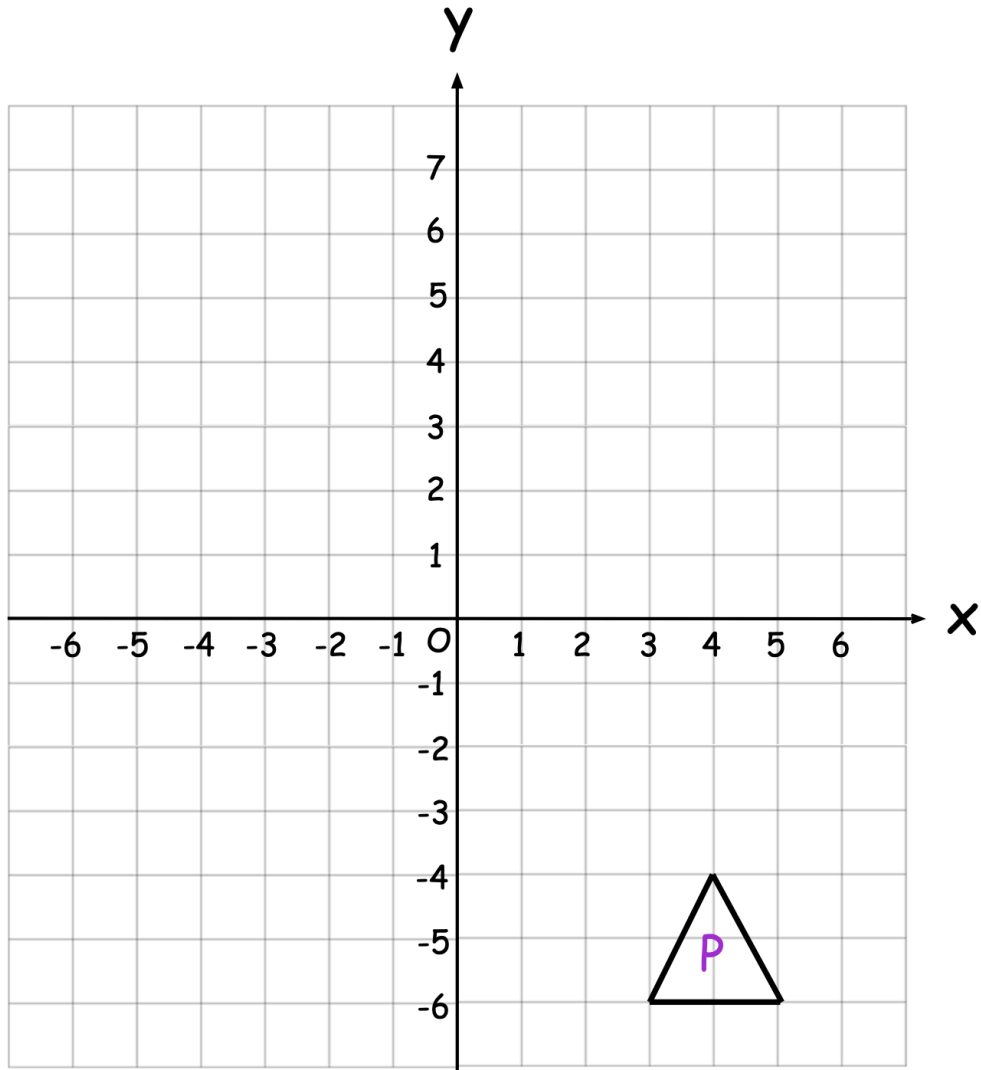
4. Shown below is a rectangle drawn on a coordinate grid.



Enlarge the rectangle by scale factor  $-2$ , using the origin as centre of enlargement.

(2)

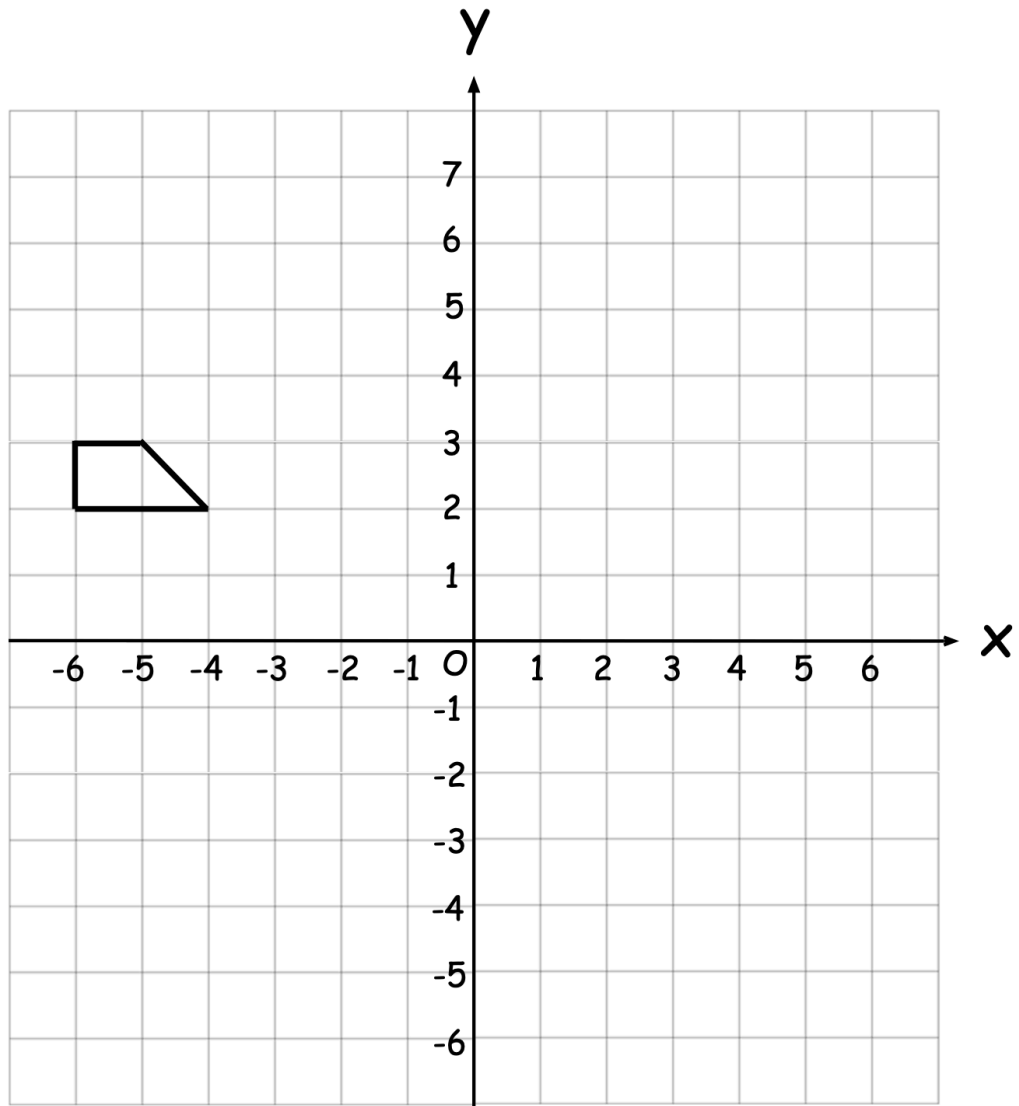
5.



Enlarge triangle P by scale factor  $-2$  with centre of enlargement  $(2, -3)$

(2)

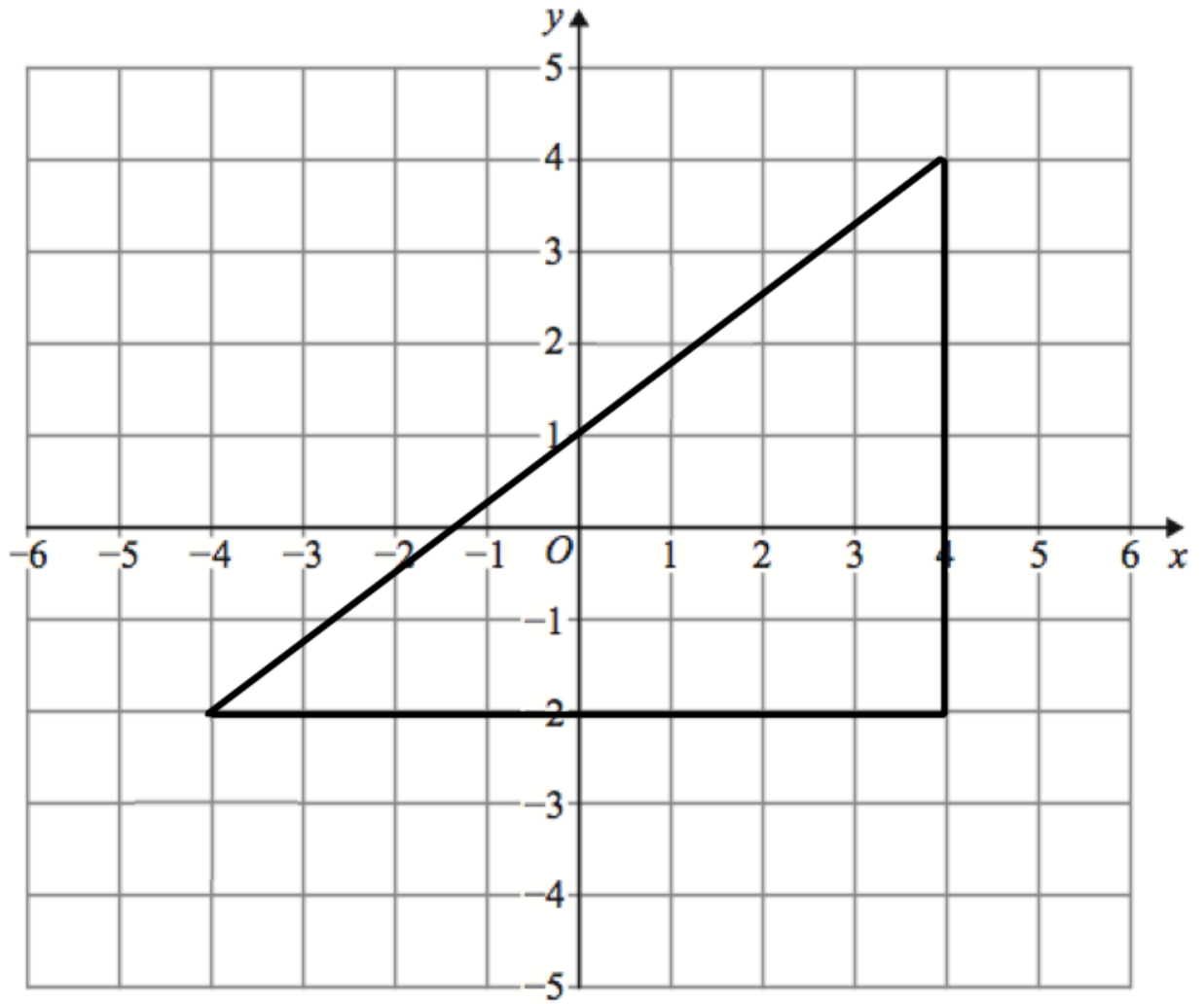
6.



Enlarge the shape by scale factor  $-3$  with centre of enlargement  $(-4, 1)$

(2)

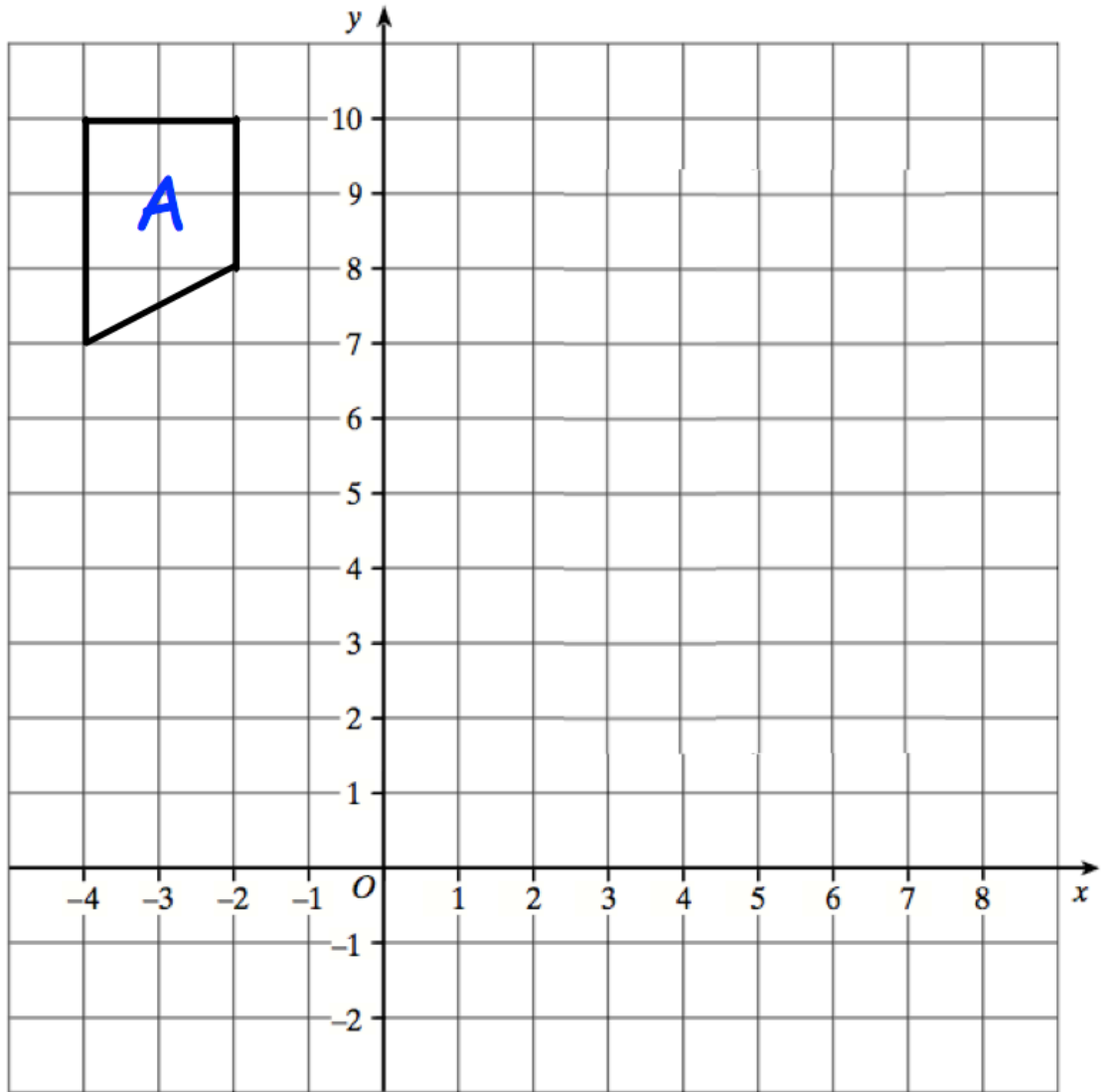
7.



Enlarge the triangle by scale factor  $-\frac{1}{2}$  using centre of enlargement (2, 0)

(3)

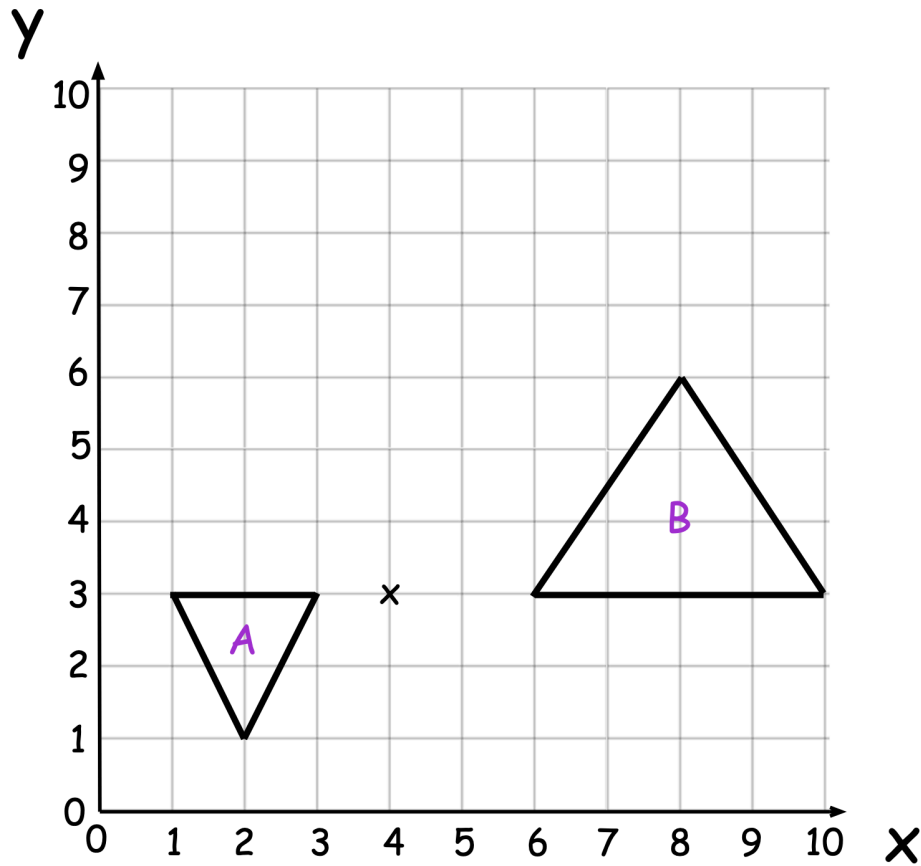
8.



Enlarge shape A by scale factor  $-2$ , using centre of enlargement  $(0, 6)$

**(3)**

9. Saoirse was asked to enlarge triangle A by scale factor  $-2$  using centre  $(4, 3)$ .



Explain the mistake that Saoirse has made.

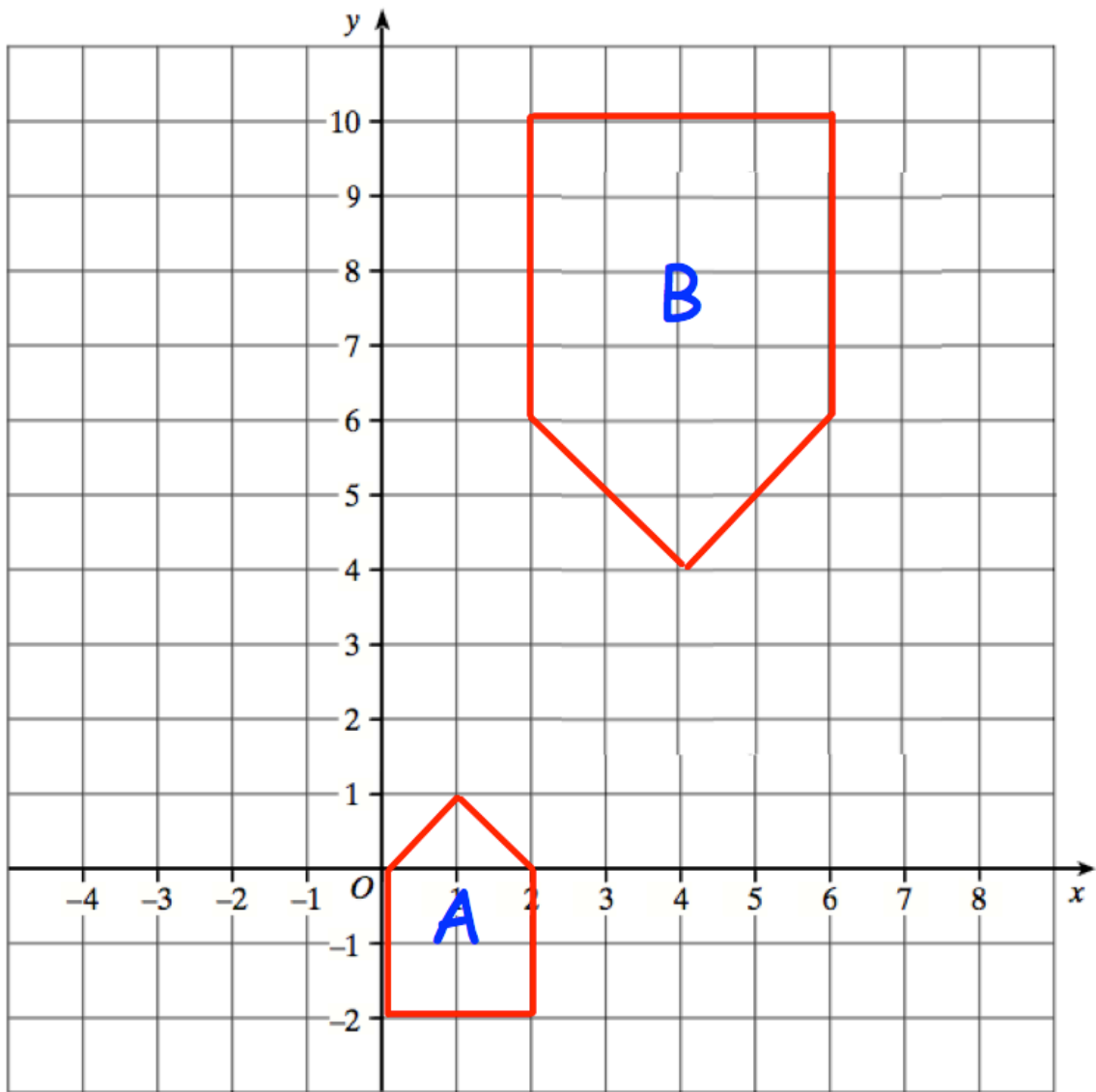
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(1)

10.



Describe fully the single transformation that maps shape A onto shape B.

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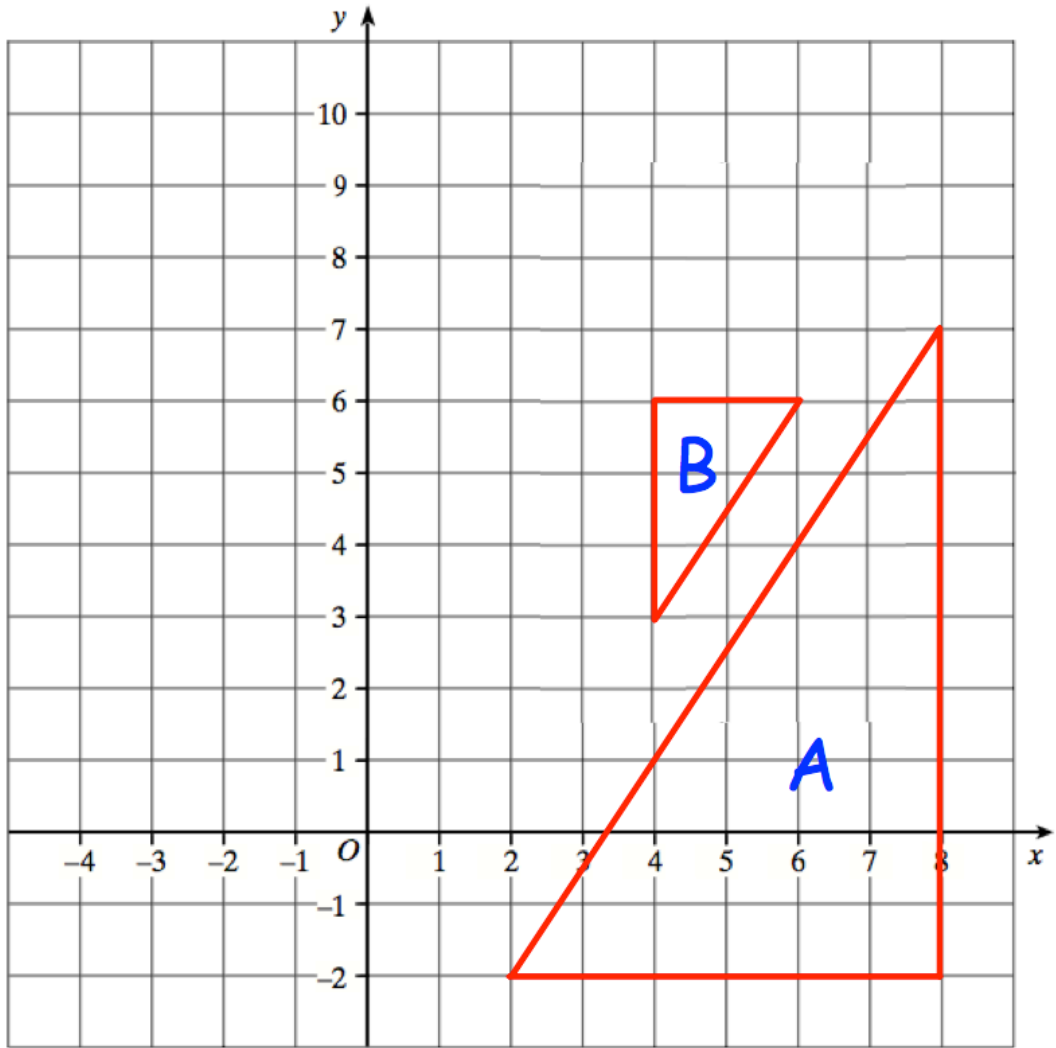
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(2)

11.



Describe fully the single transformation that maps shape A onto shape B.

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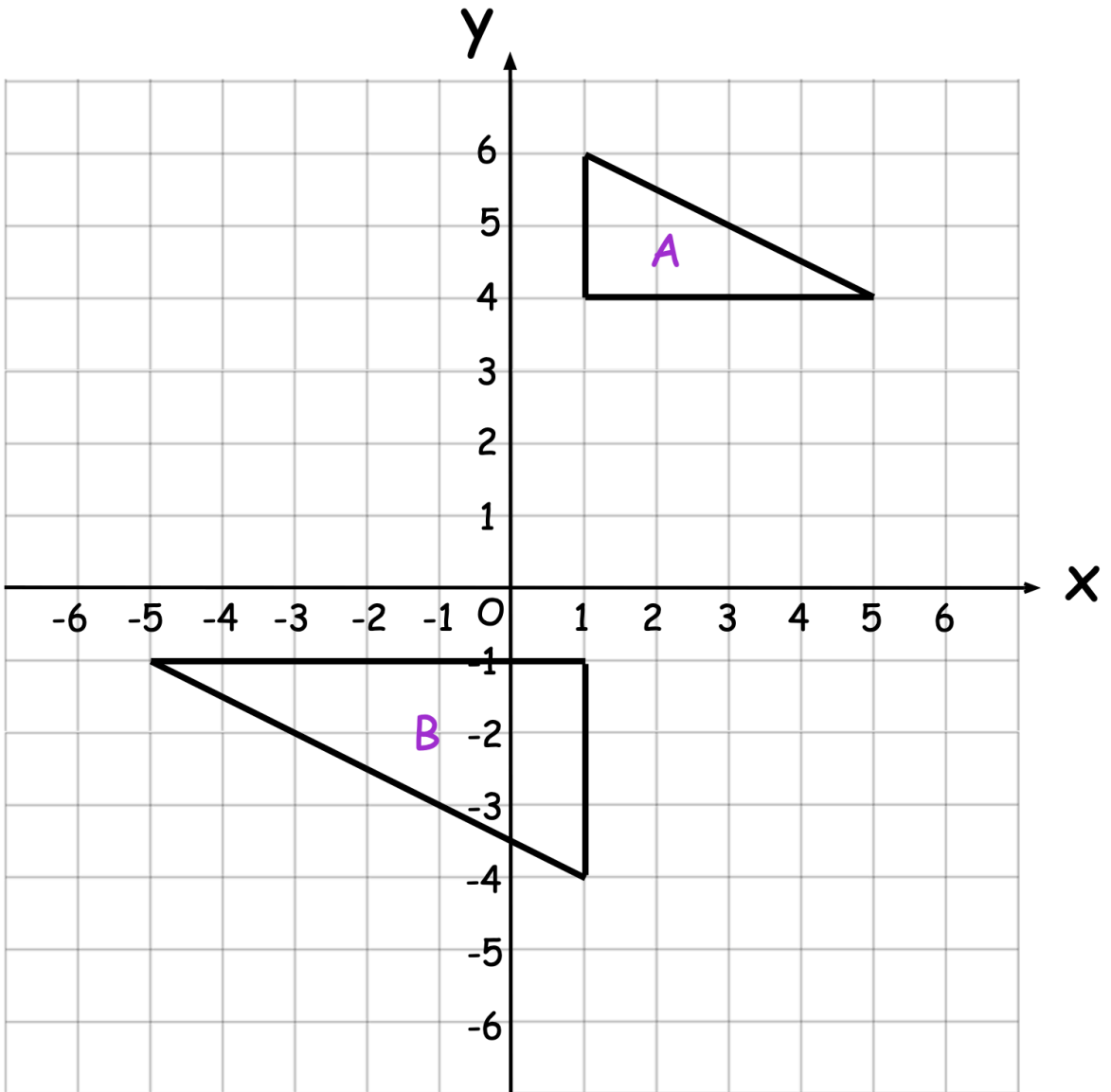
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(2)

12.



Describe fully the single transformation that maps triangle A onto triangle B.

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(2)