Name:

Exam Style Questions

Enlargements

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

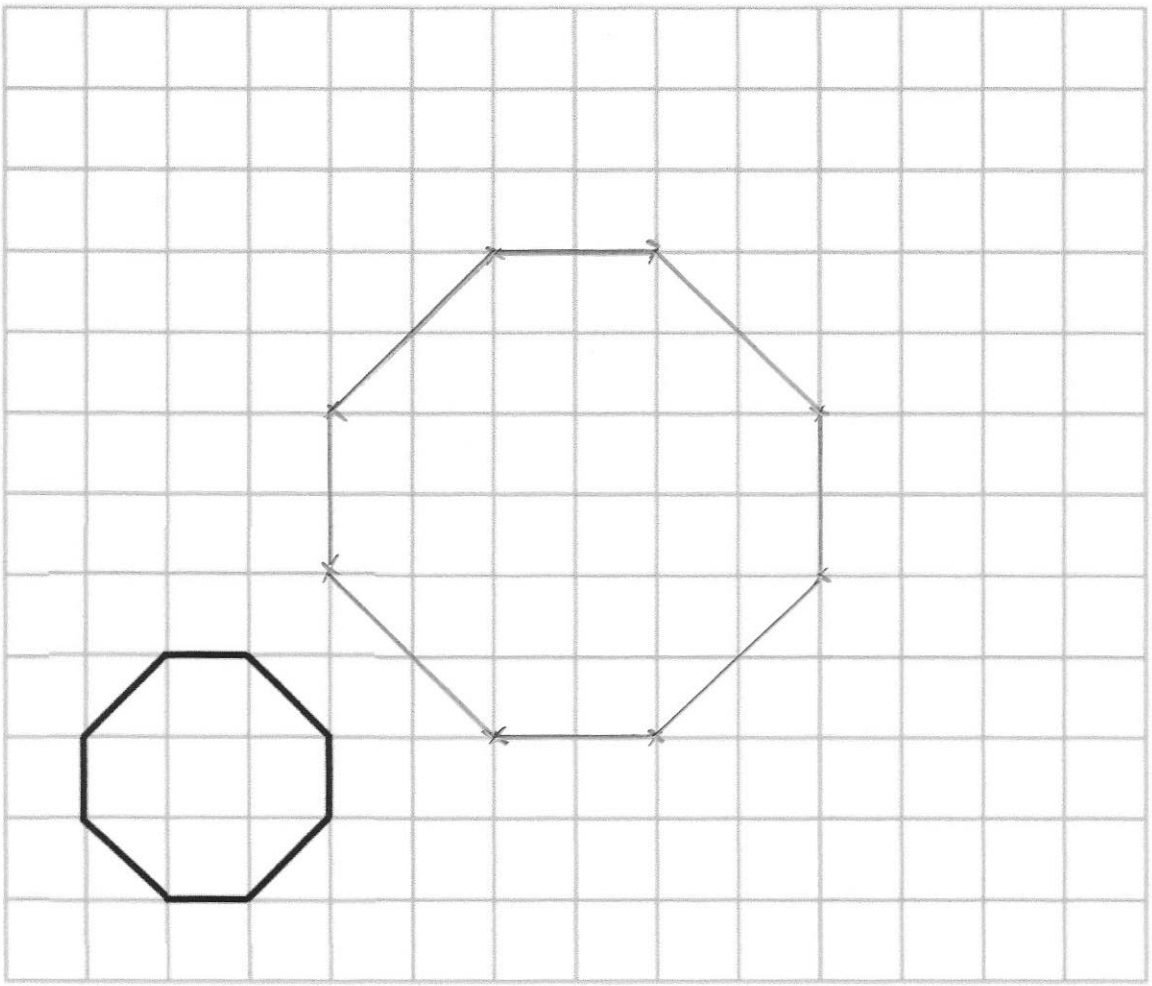
Video Tutorial

www.corbettmaths.com/contents

Videos 104, 105, 106, 107

Answers and Video Solutions

1.



(a) Name the shape drawn on the grid.

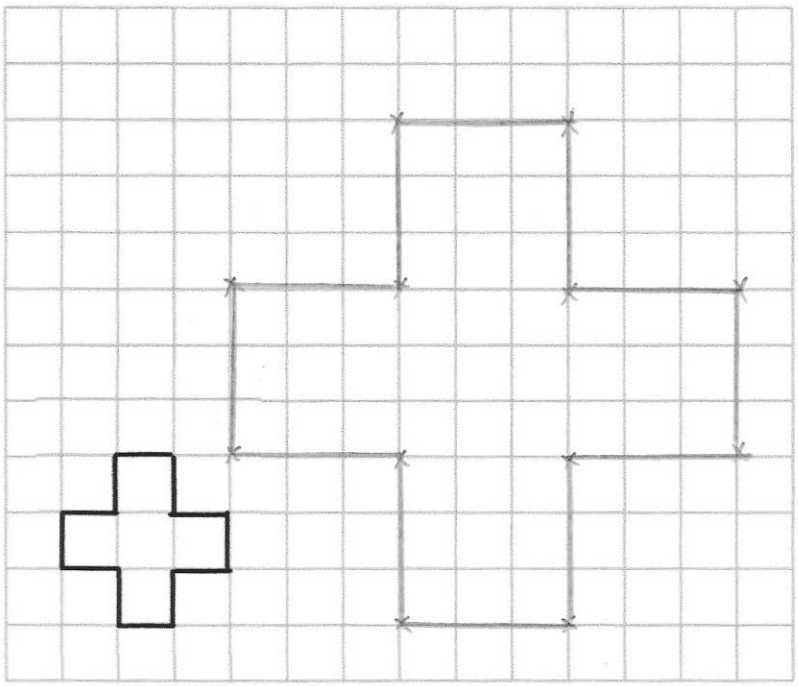
Octagon

(1)

(b) On the grid, enlarge the shape using a scale factor of 2

(2)

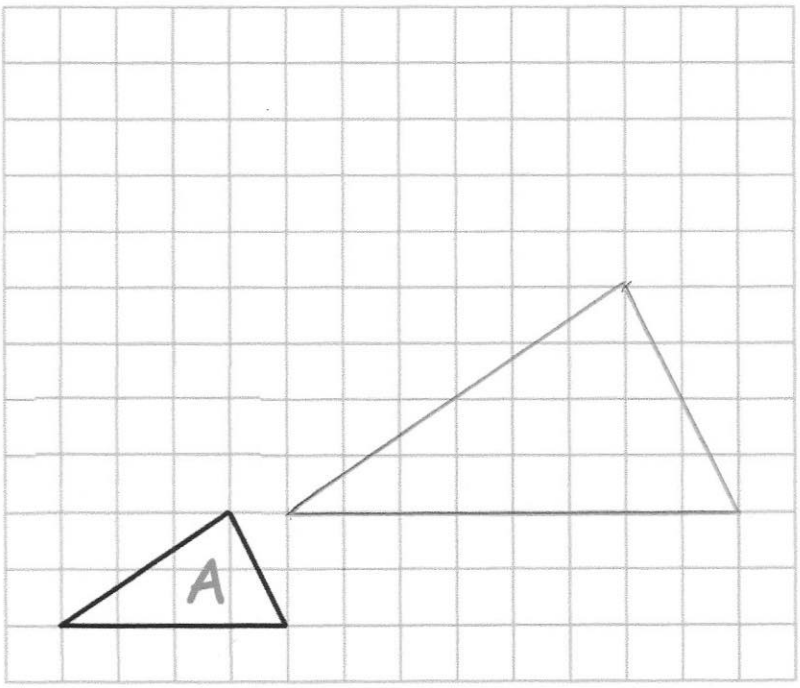
2.



On the grid, enlarge the shape using a scale factor of 3.

(2)

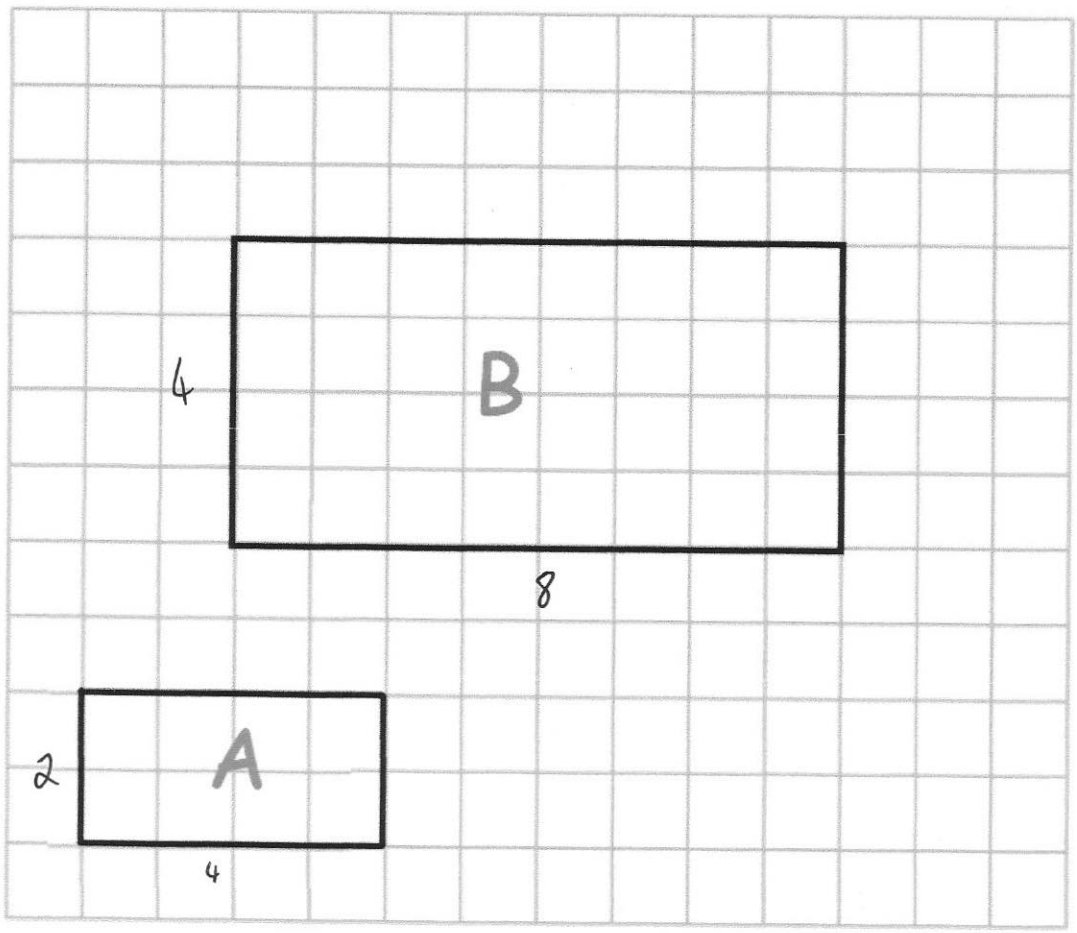
3.



On the grid, draw an enlargement of shape A with a scale factor of 2.

(2)

4. Two rectangles, A and B, are drawn on a centimetre grid.



(a) Work out the area of rectangle A.

$2 \times 4 = 8$

8 .....cm²

(1)

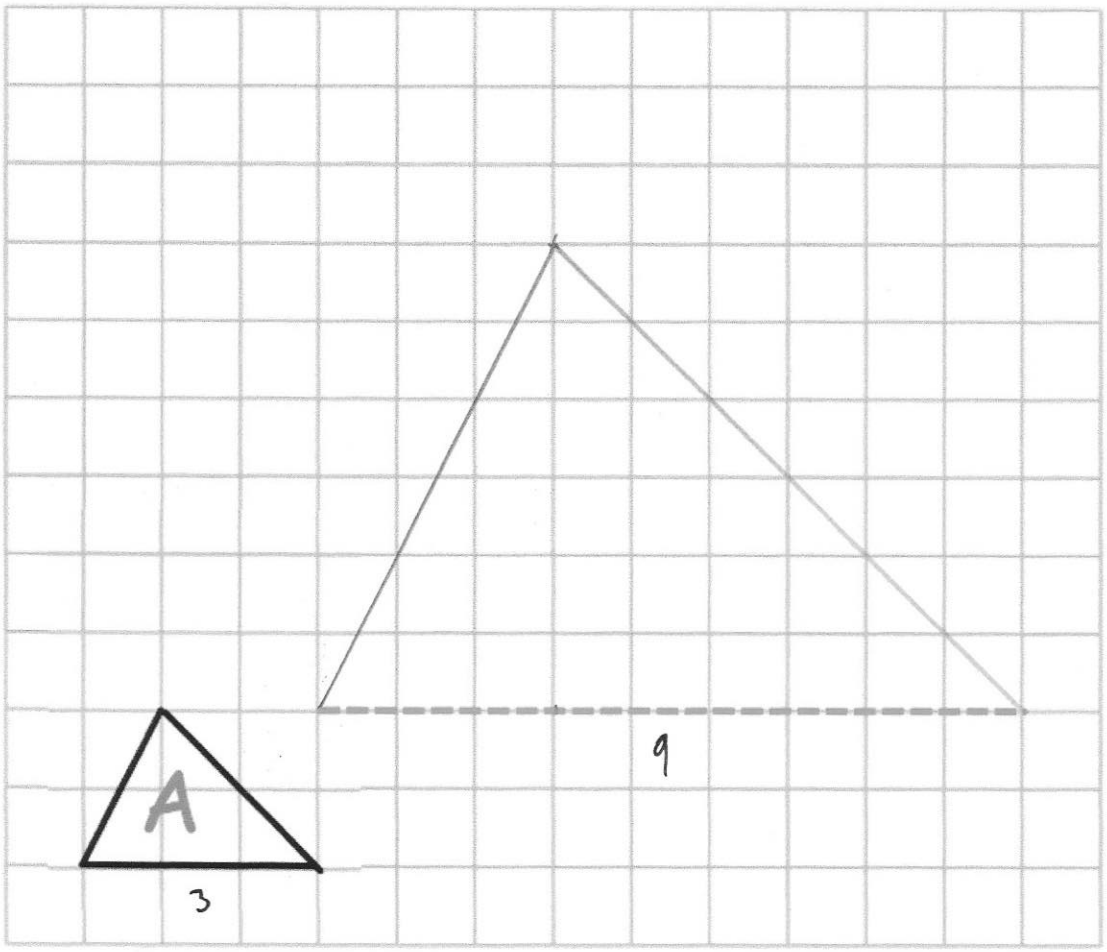
Rectangle B is an enlargement of rectangle A.

(b) What is the scale factor of the enlargement?

2 .....

(1)

5. The diagram shows a triangle.
The dotted line is a side of an enlargement of the triangle.



(a) What is the scale factor of the enlargement?

3

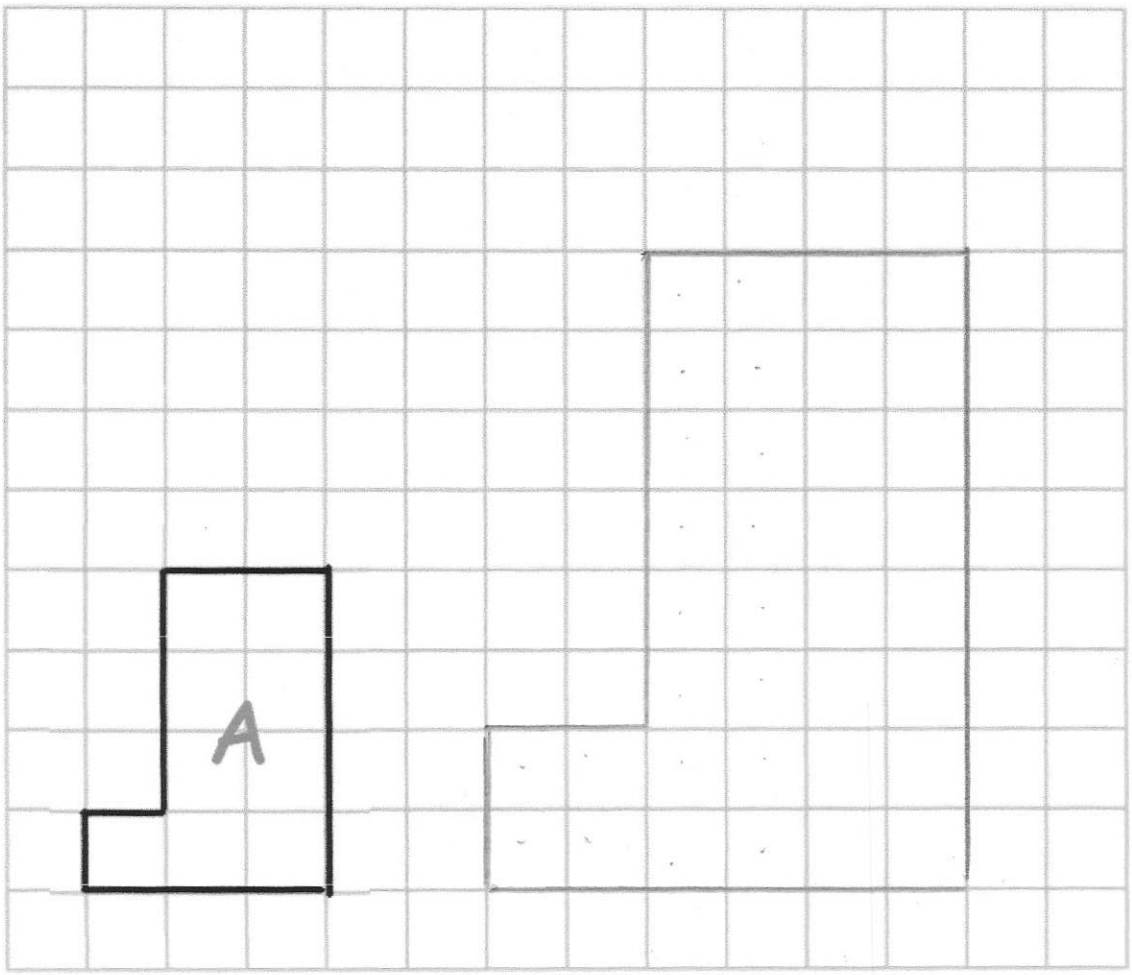
.....

(1)

(b) Complete the enlarged triangle.

(2)

6. Shown below is an L shape that has area 9cm².

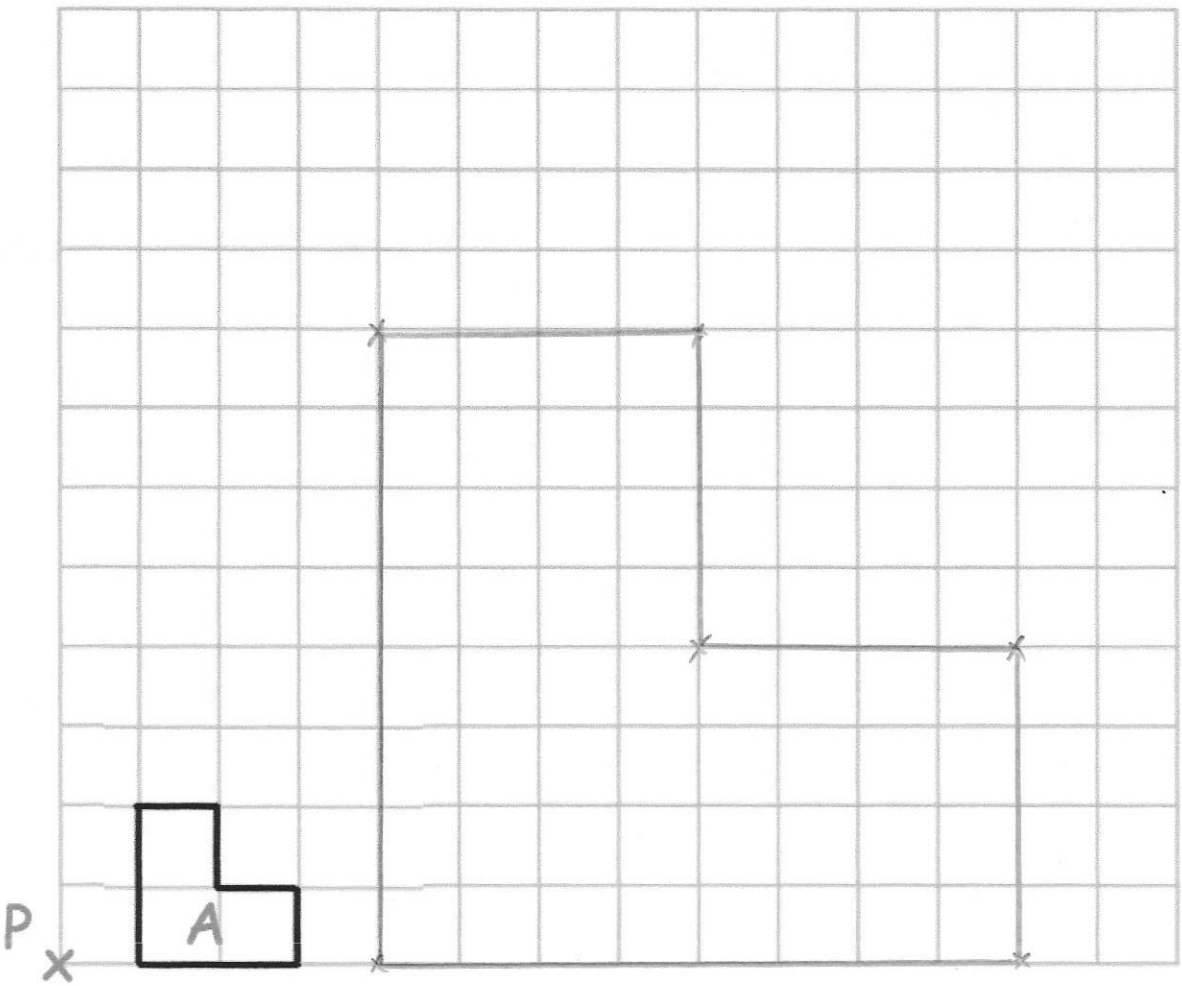


Work out the area of the L-shape after an enlargement of scale factor 2.

36 .....cm²

(2)

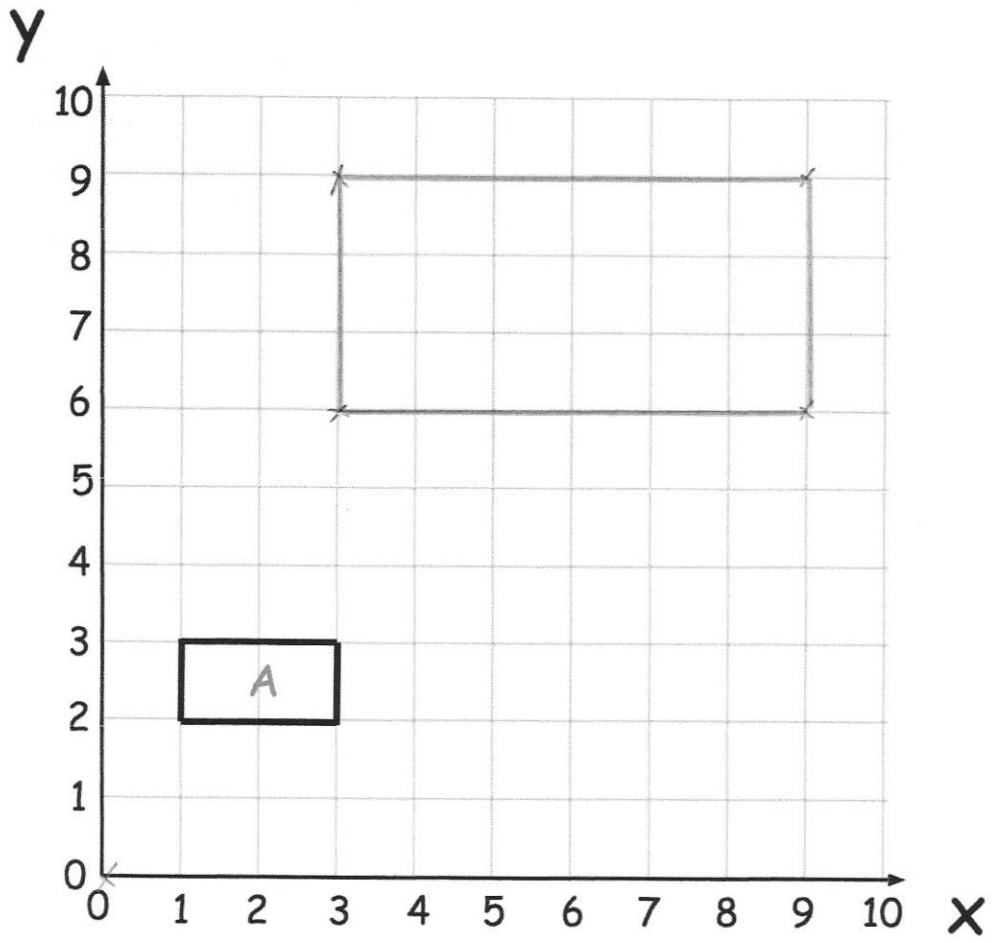
7.



Enlarge shape A by scale factor 4, using the point P as centre of enlargement.

(3)

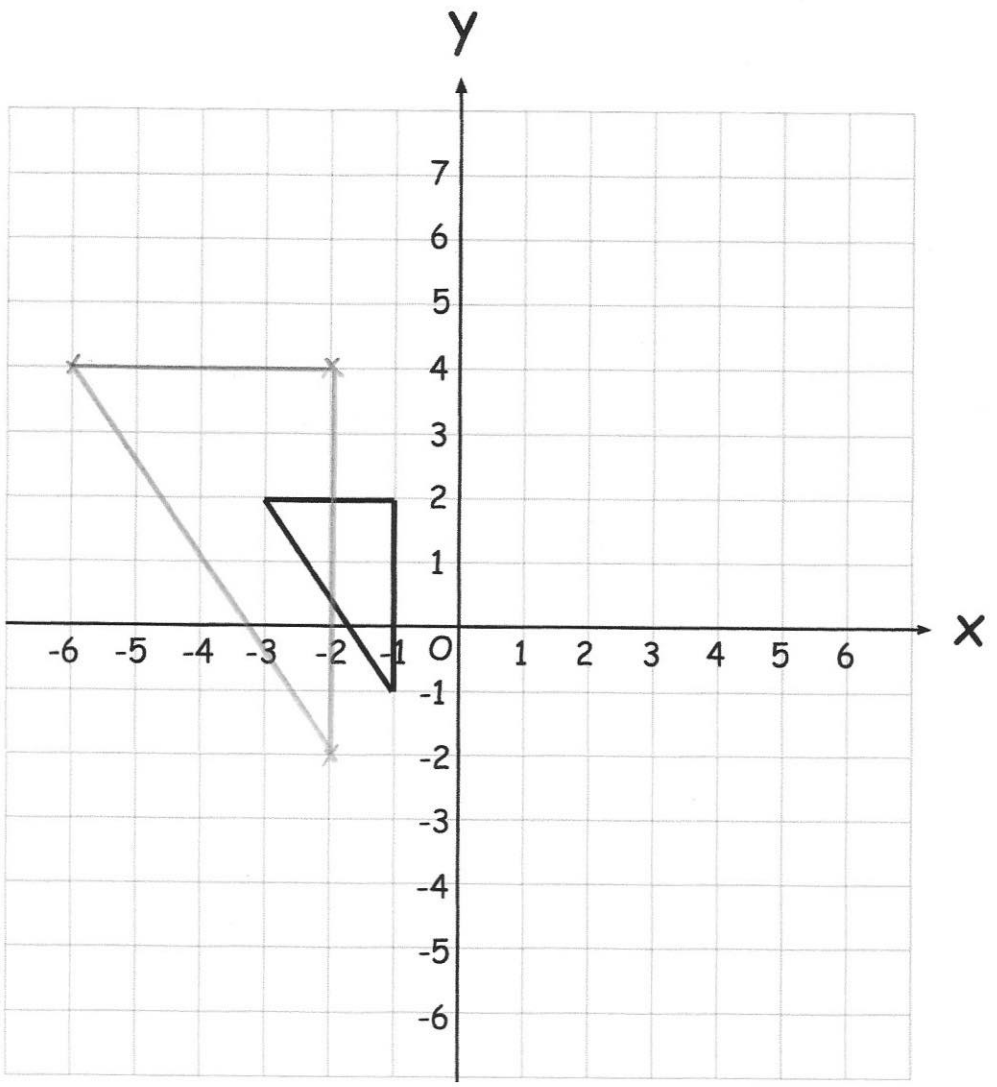
8.



Enlarge rectangle A by scale factor 3 with centre (0, 0)

(3)

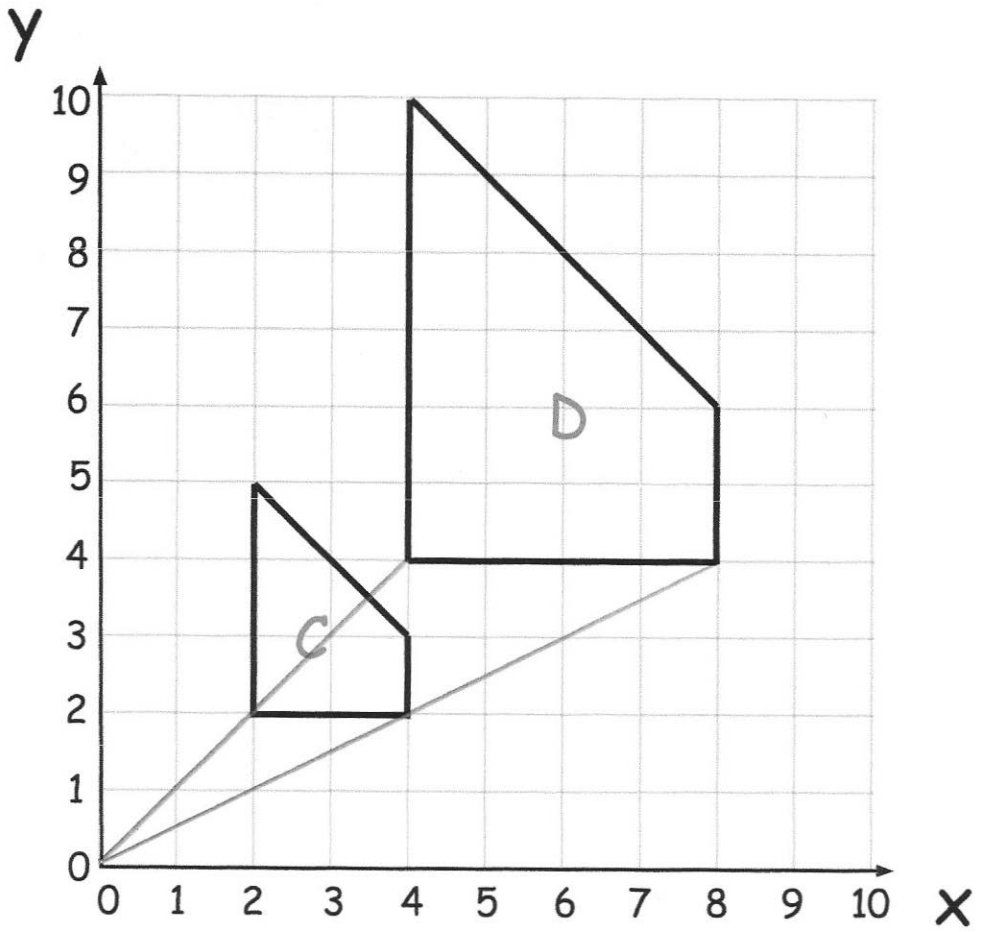
9.



Enlarge the triangle using a scale factor of 2 and centre of enlargement (0, 0).

(3)

10.

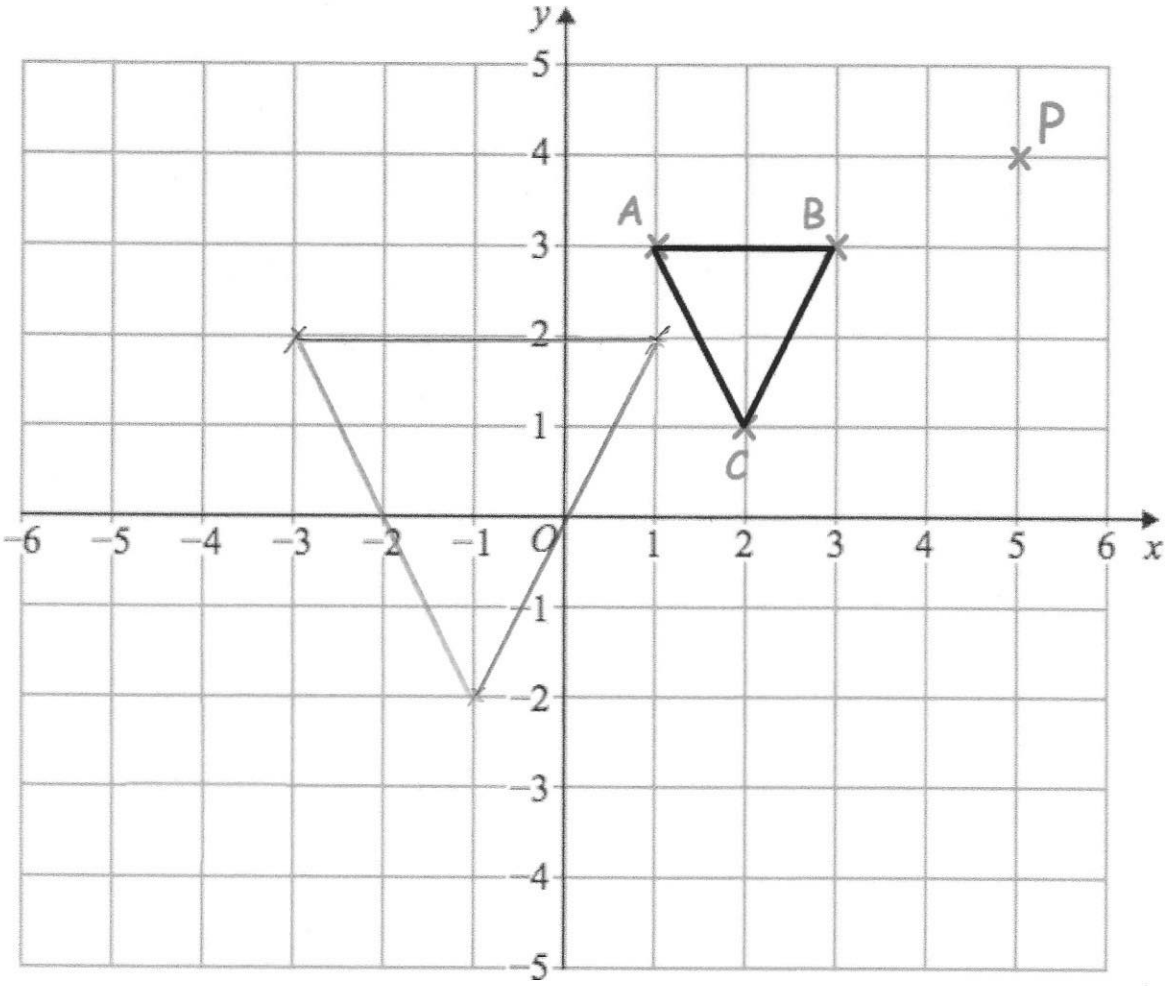


Describe fully the single transformation which maps trapezium C onto trapezium D.

Enlargement, scale factor 2, centre of enlargement (0, 0).

(2)

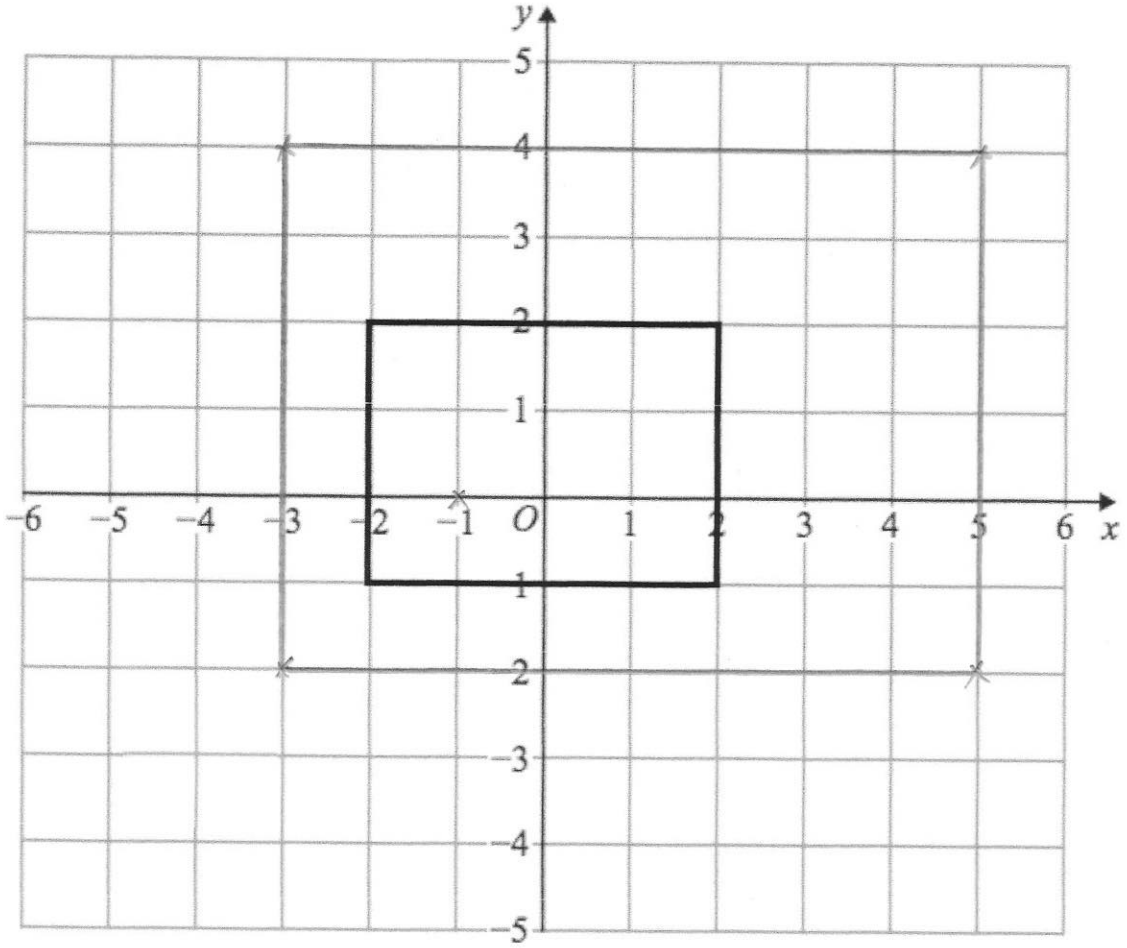
11.



Enlarge triangle ABC by scale factor 2, using the point P as the centre of enlargement.

(3)

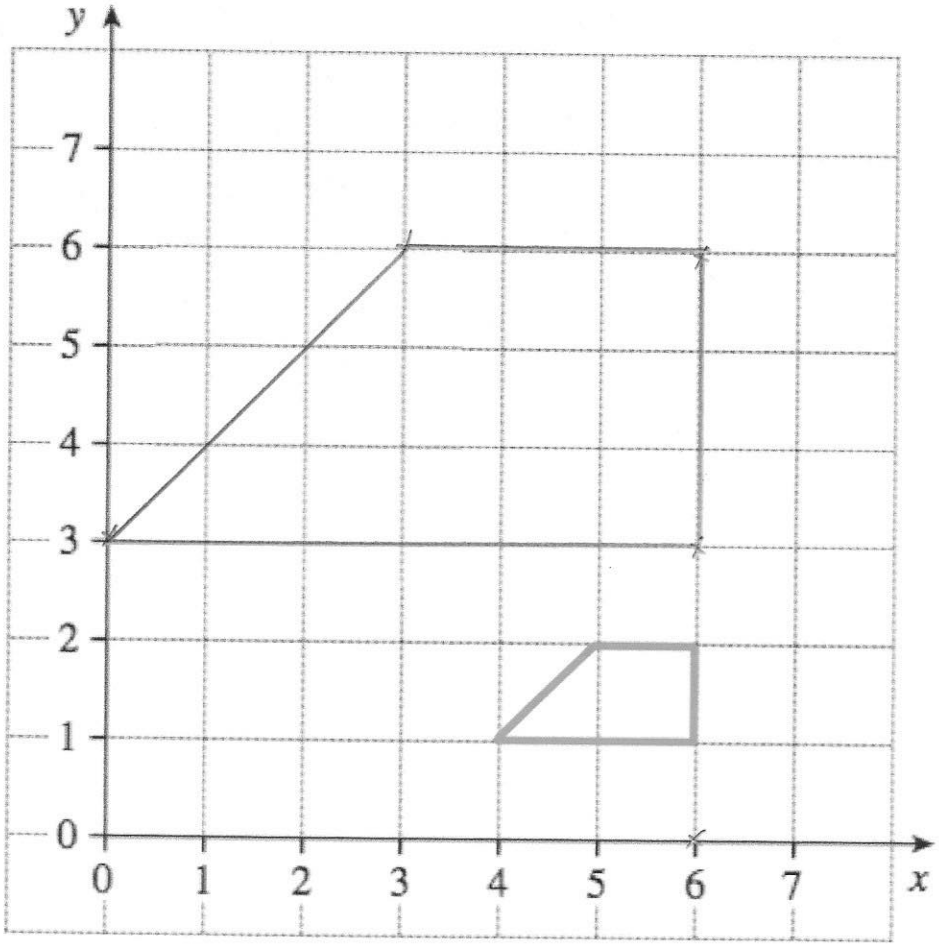
12. Shown below is a rectangle drawn on a coordinate grid.



Enlarge the rectangle by scale factor 2, using centre of enlargement (−1, 0).

(3)

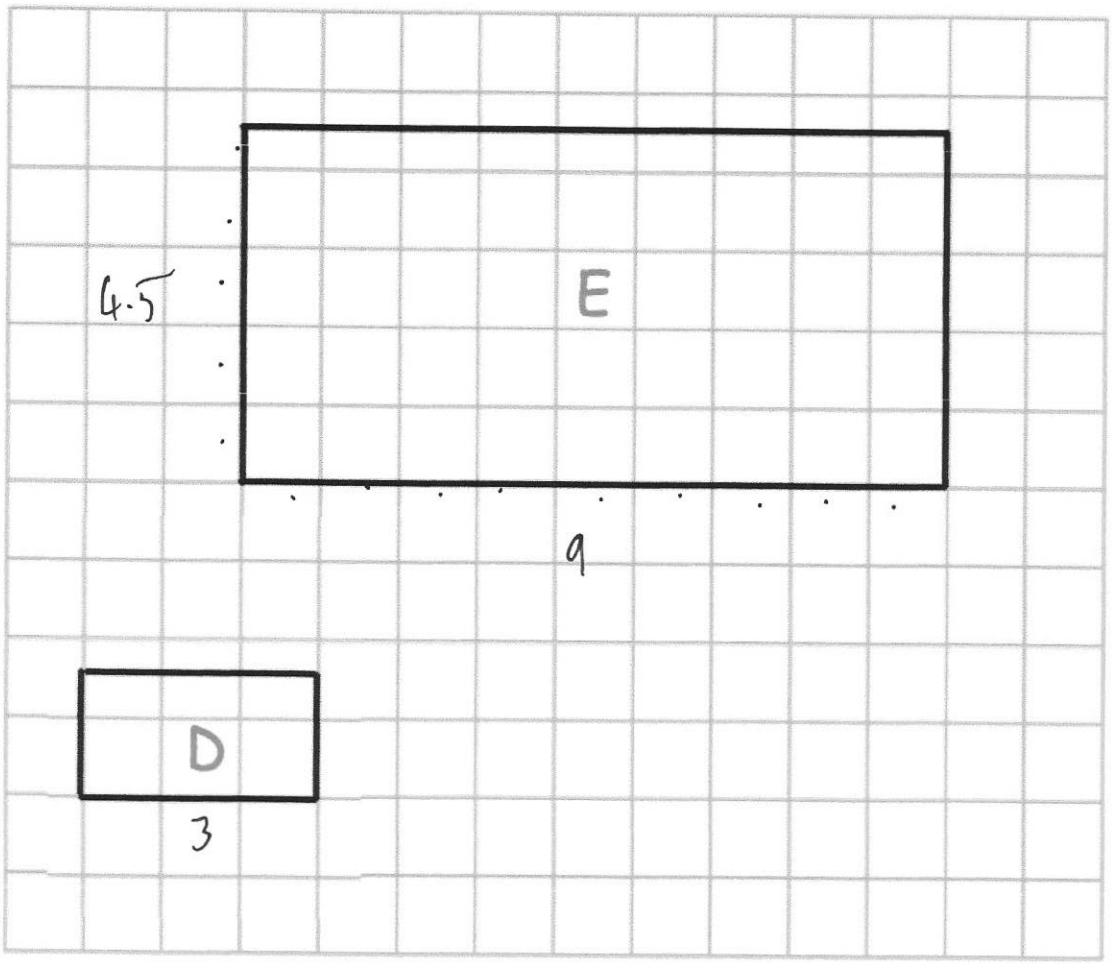
13.



Enlarge the trapezium by scale factor 3, centre (6, 0).

(2)

14. Rectangle E is an enlargement of rectangle D on the centimetre grid.



(a) What is the scale factor of the enlargement?

3

.....

(1)

Rectangle E is enlarged by scale factor 20 to give rectangle F.

(b) Write down the length and width of rectangle F.

$9 \times 20 = 180$

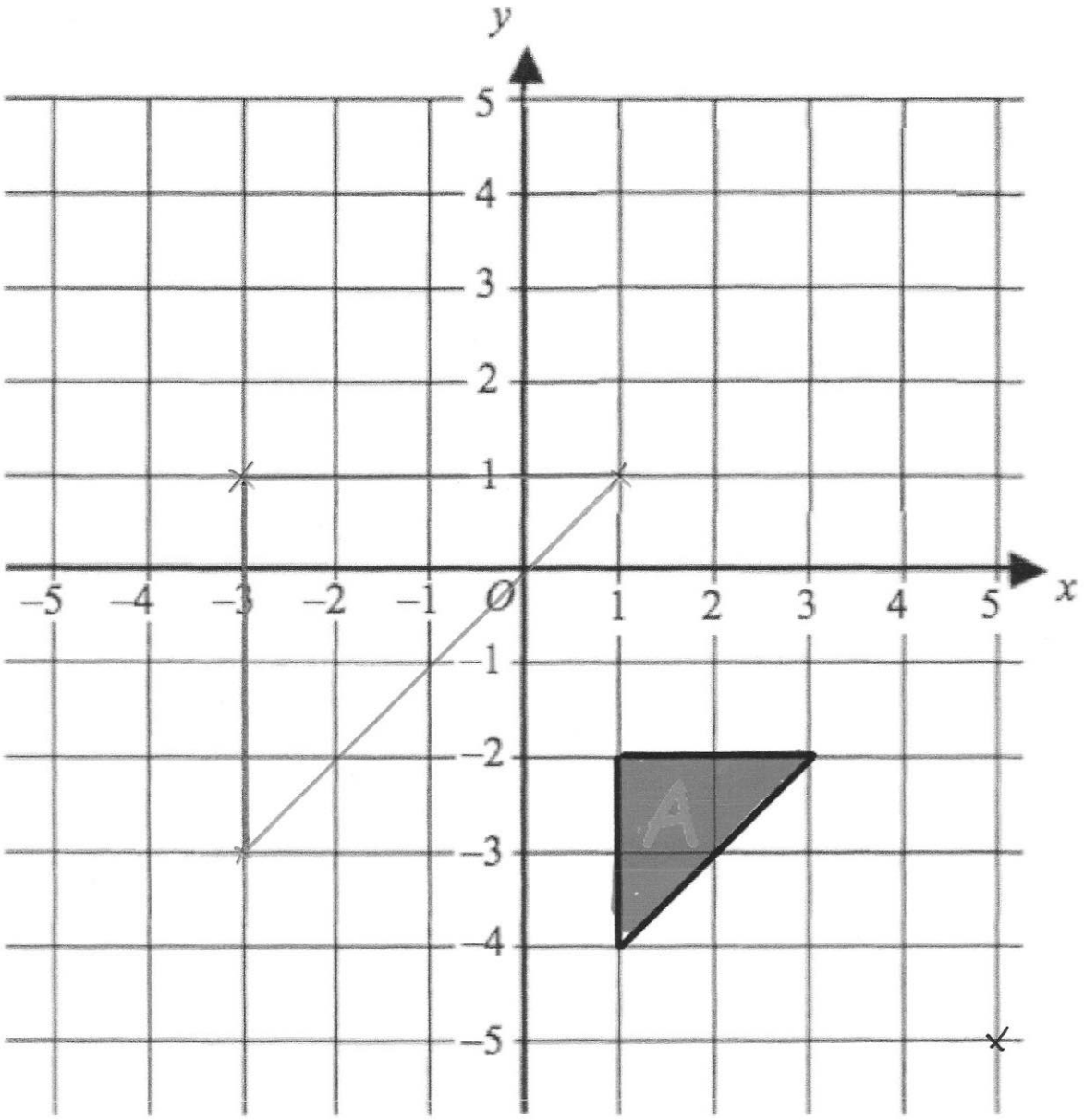
$4.5 \times 20 = 90$

Length 180 .....cm

Width 90 .....cm

(2)

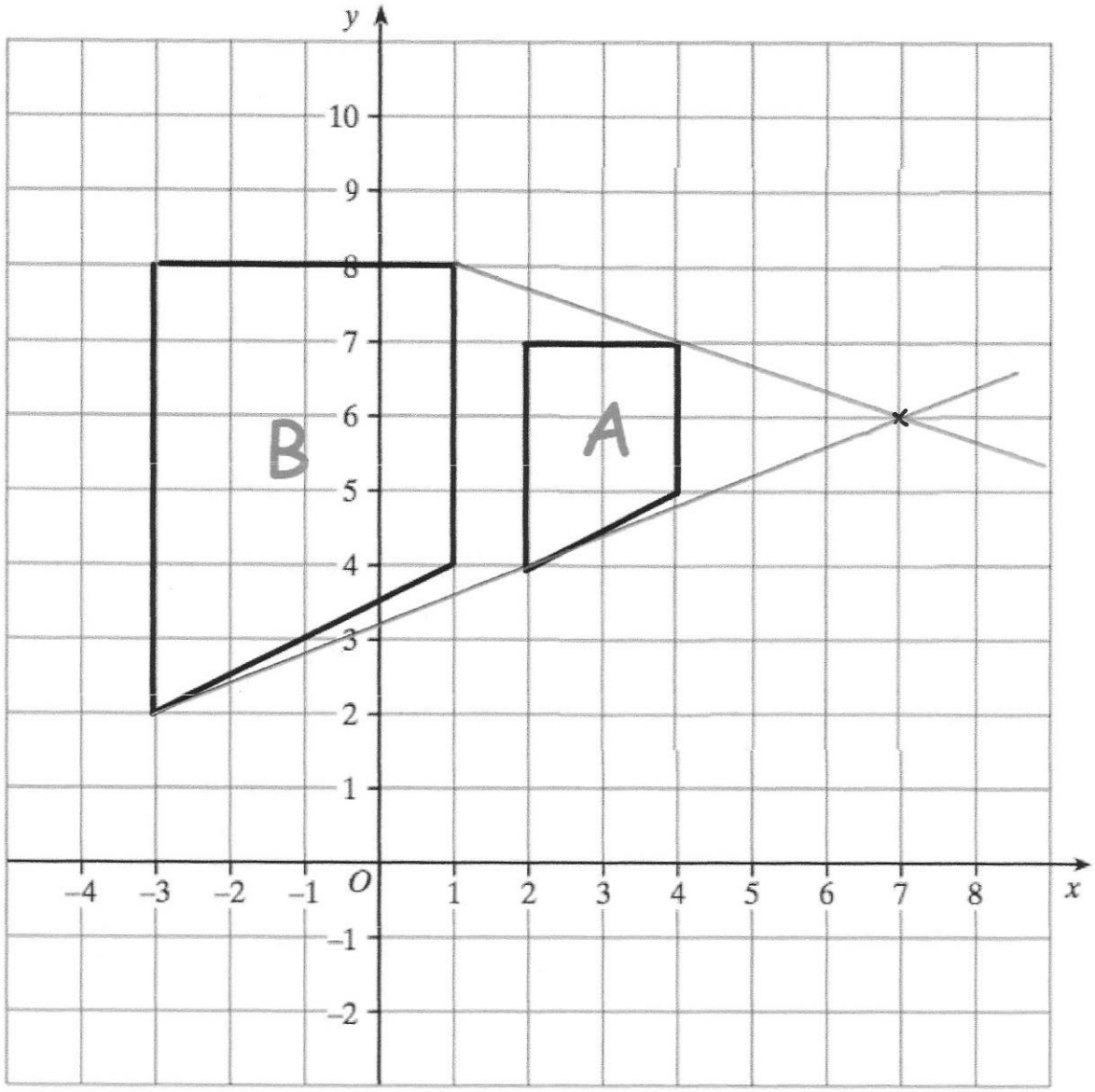
15.



Enlarge triangle A by scale factor 2, using centre of enlargement (5, –5).

(3)

16.

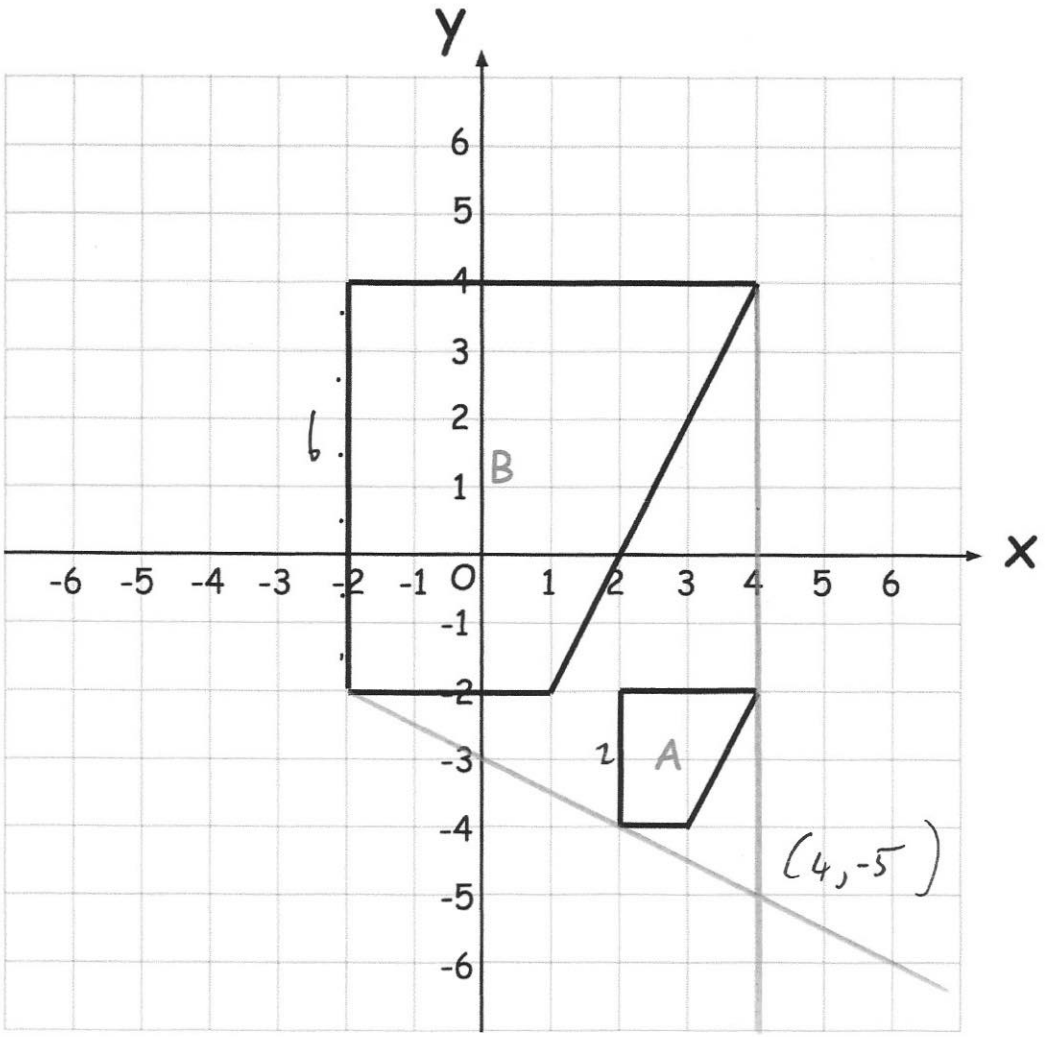


Describe fully the single transformation that maps shape A onto shape B.

An enlargement by scale factor 2, centre of enlargement (7, 6)

(3)

17.

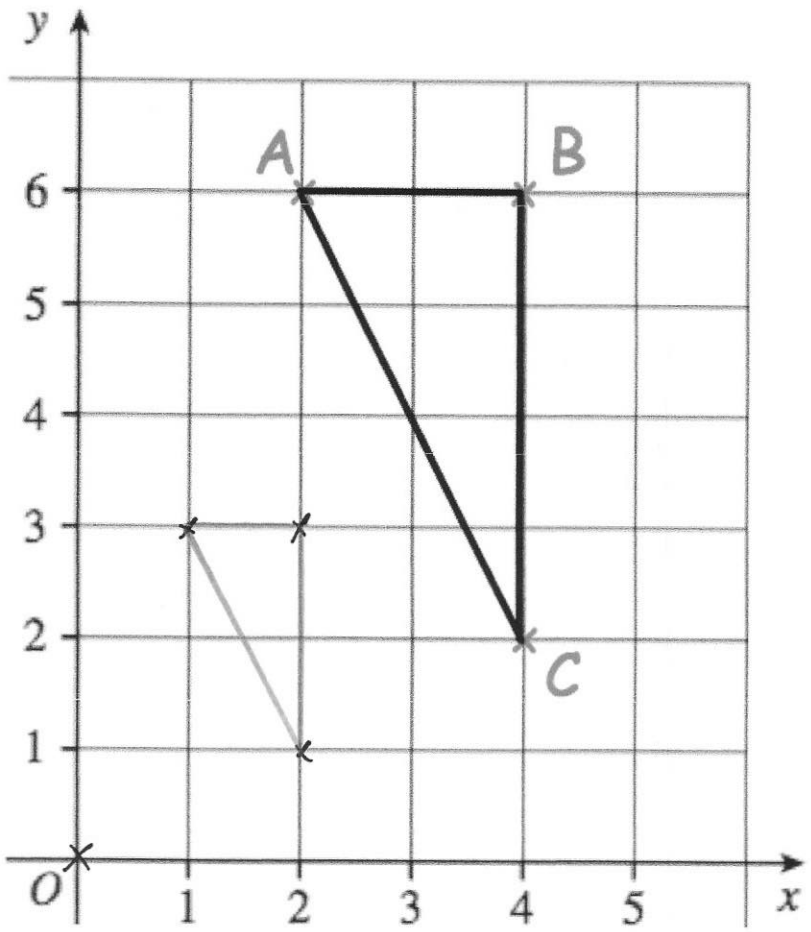


Describe fully the single transformation that maps shape A onto shape B.

Enlargement by scale factor 3 using (4,-5) as the centre of enlargement.

(3)

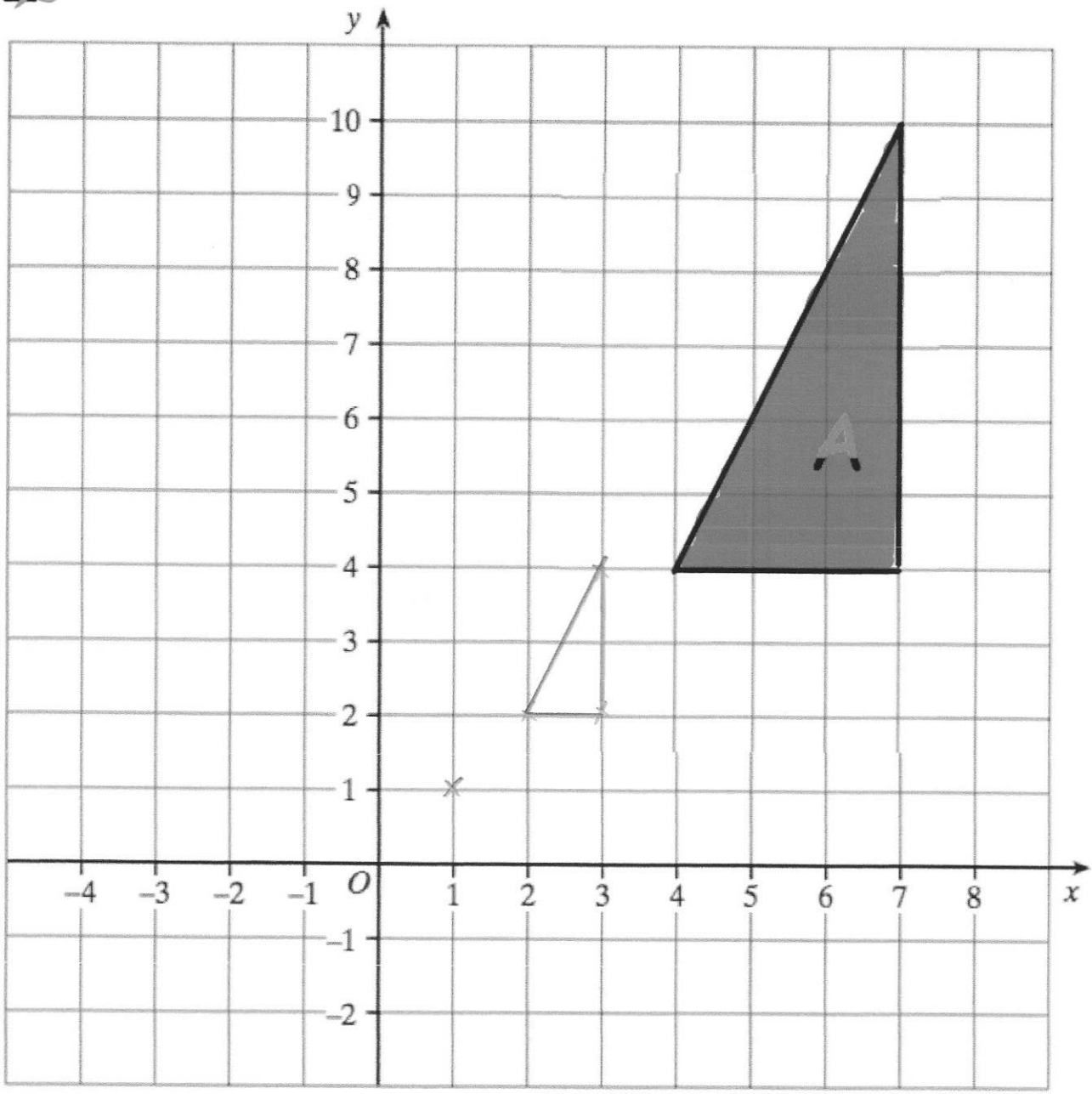
18.



Triangle ABC is drawn on the grid.

Enlarge triangle ABC with scale factor $\frac{1}{2}$ and centre (0, 0)

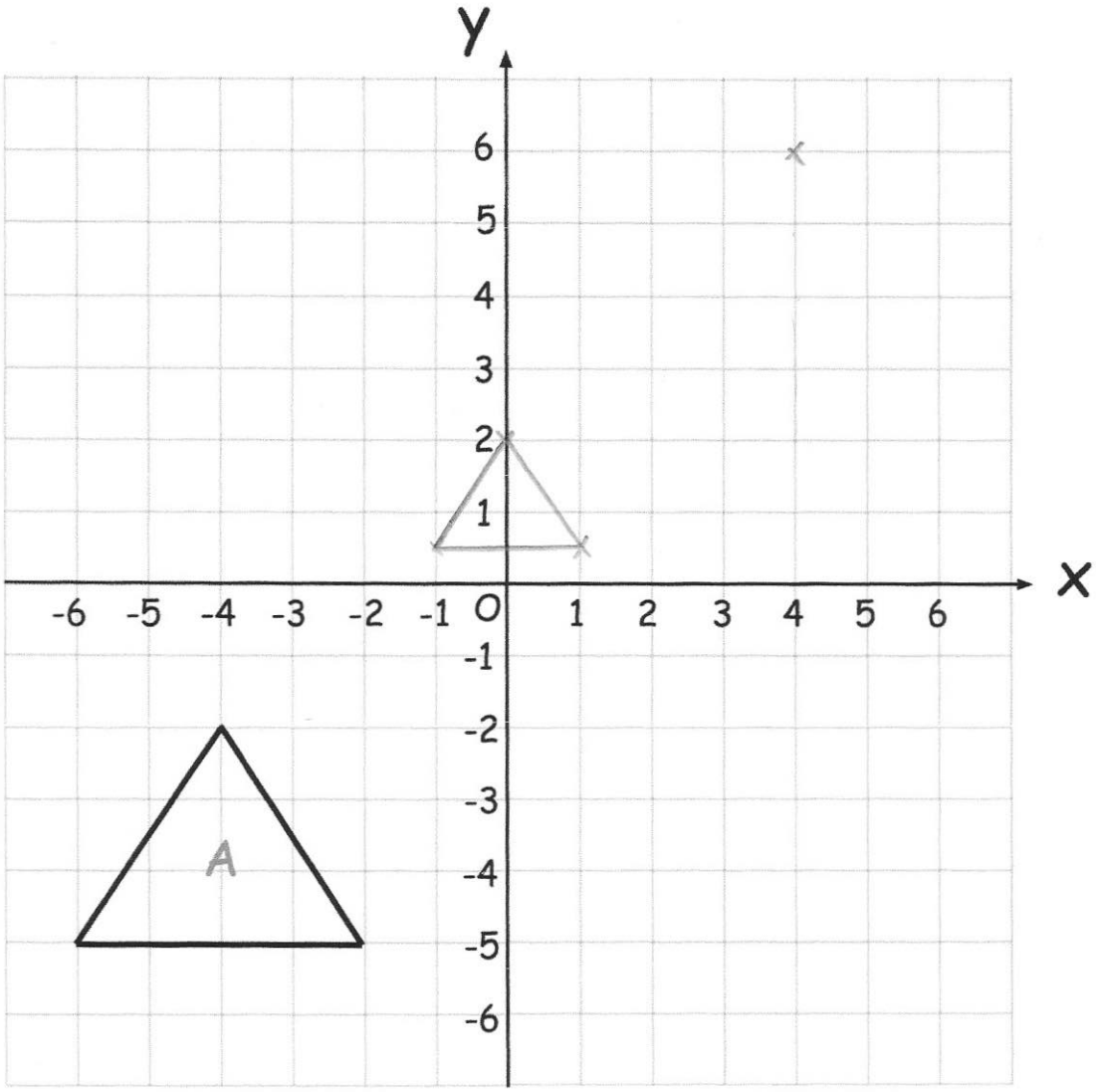
19. The diagram shows shape A



Draw the enlargement of shape A with scale factor $\frac{1}{3}$ and centre of enlargement (1,1)

(3)

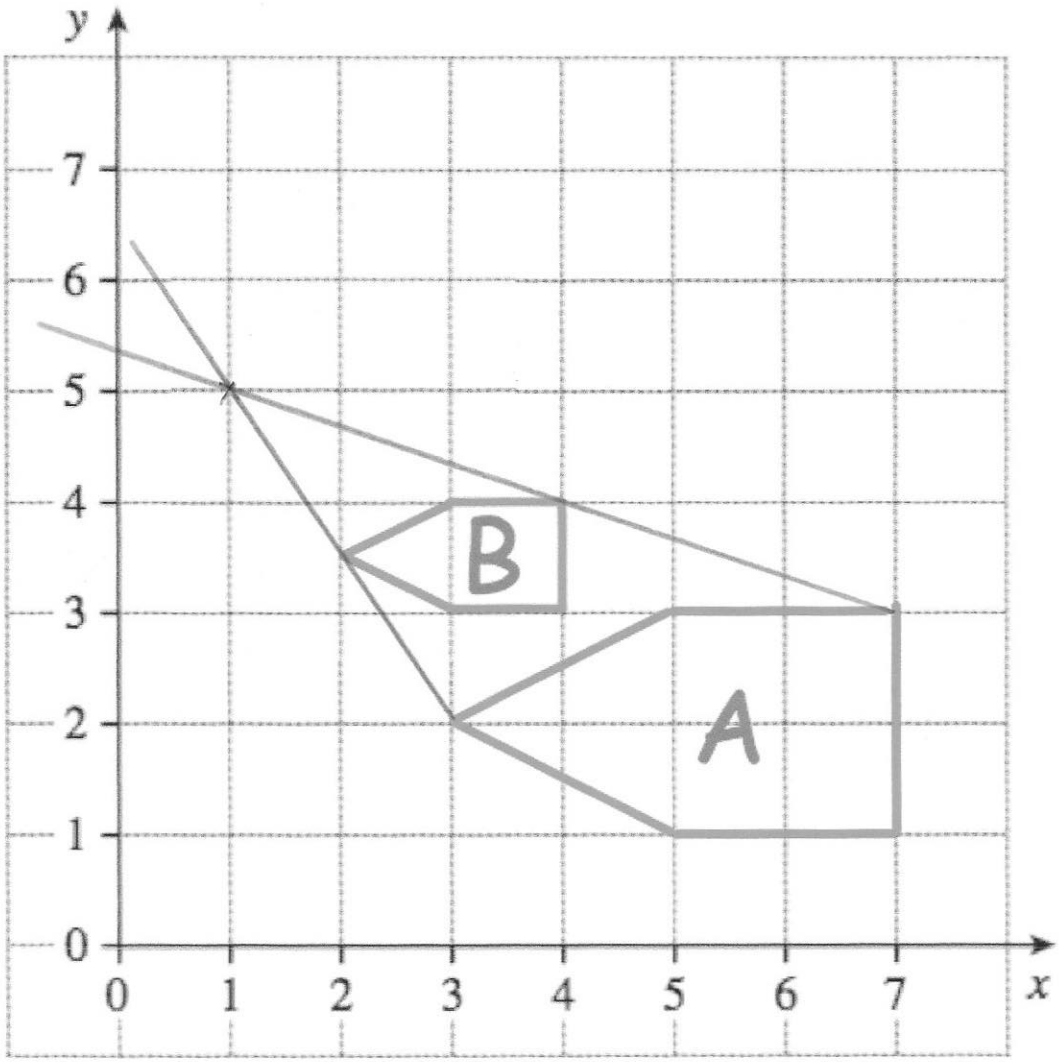
20.



Enlarge triangle A by scale factor $\frac{1}{2}$ and centre $(4, 6)$

(3)

21.

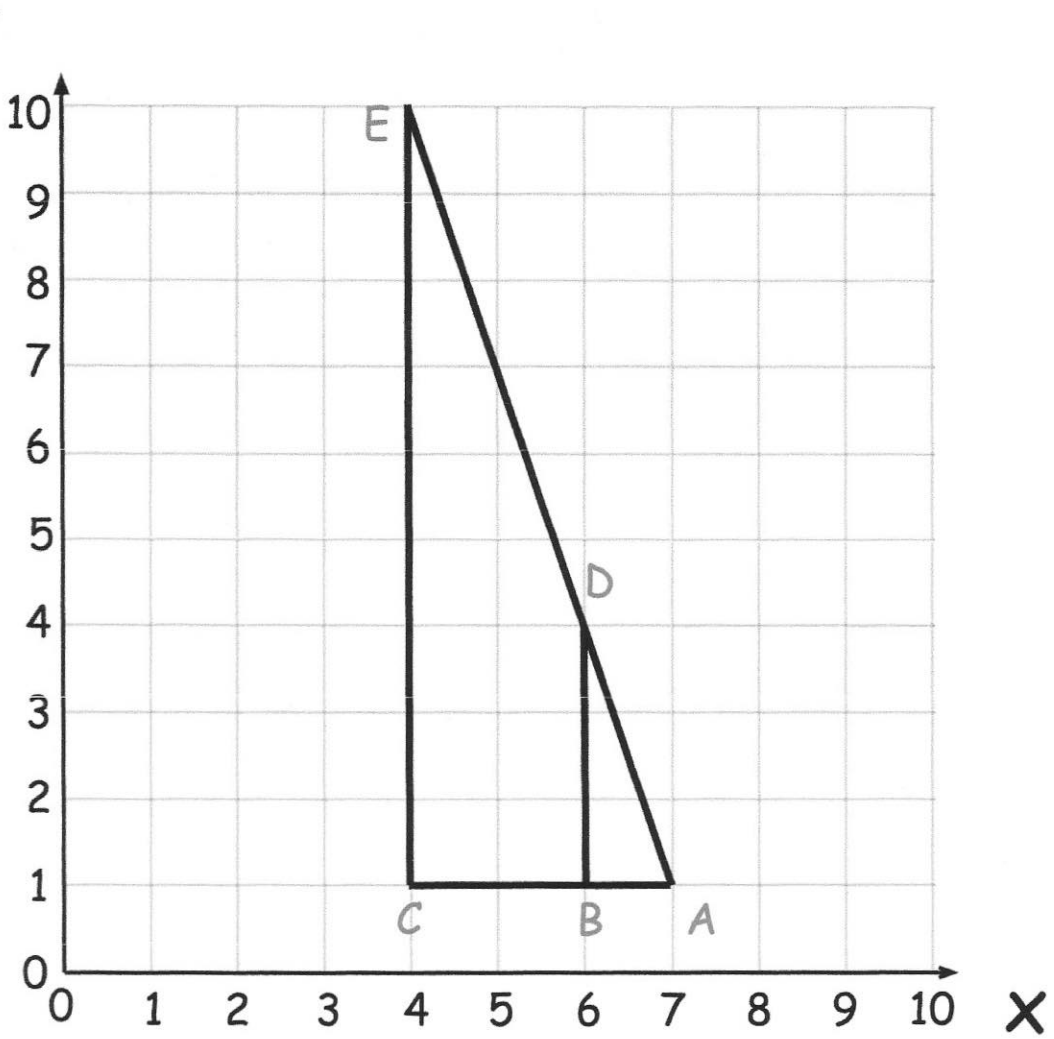


Describe fully the single transformation that maps shape A onto shape B.

An enlargement, scale factor $\frac{1}{2}$, centre of enlargement (1, 5)

(2)

22.



Describe fully the single transformation that maps triangle ACE to triangle ABD

Enlargement using scale factor $\frac{1}{3}$ and centre of enlargement (7, 1)

(2)