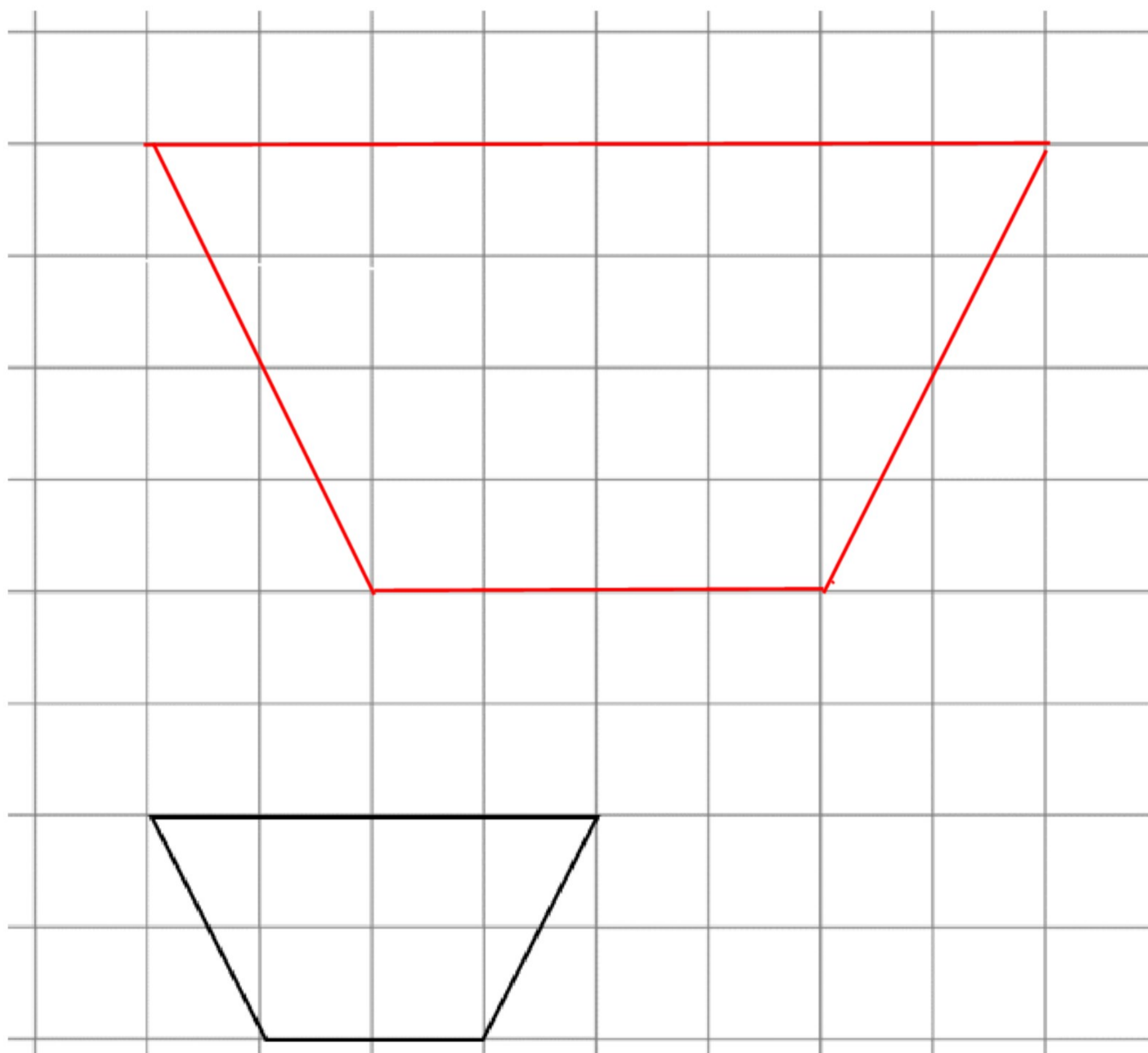




## Enlargements Exam Practice

Q1. Draw an enlargement of the shape shown on the grid using a scale factor of 2.

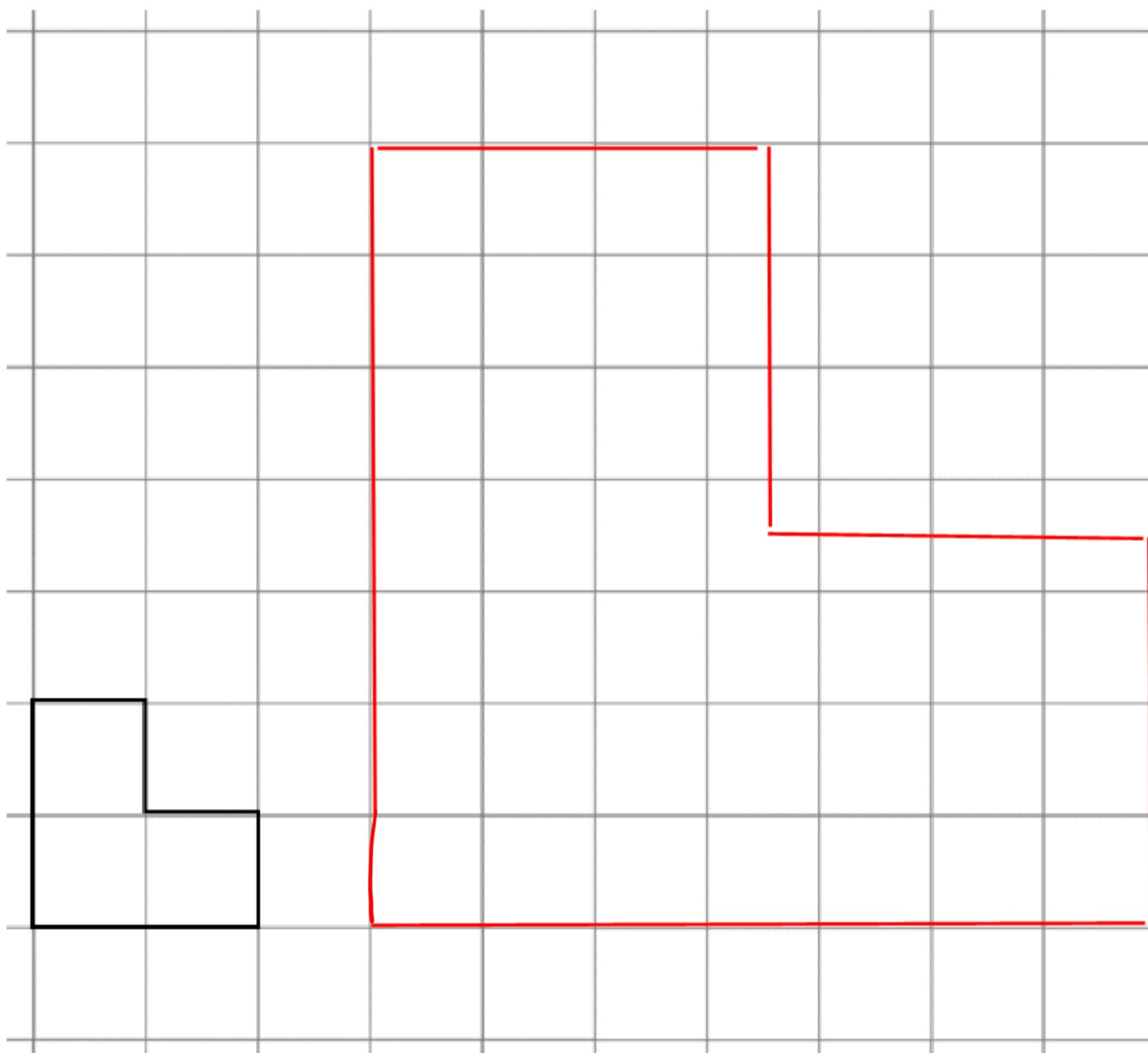


Answer: \_\_\_\_\_

(2 marks)



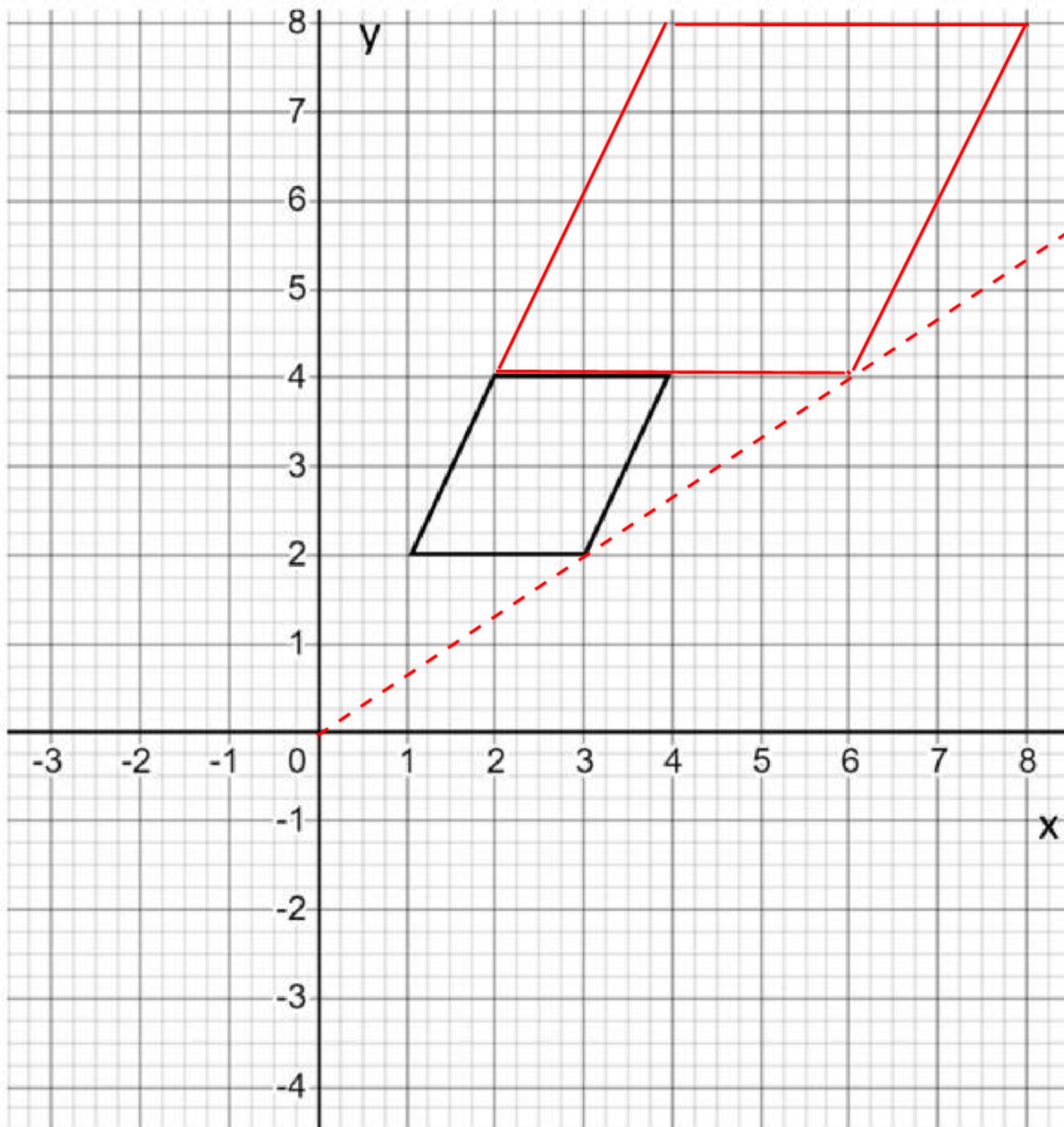
Q2. Draw an enlargement of the shape shown on the grid using a scale factor of 3.5.



Answer: \_\_\_\_\_  
(2 marks)



Q3. Enlarge the shape shown by scale factor 2 about the point (0,0).

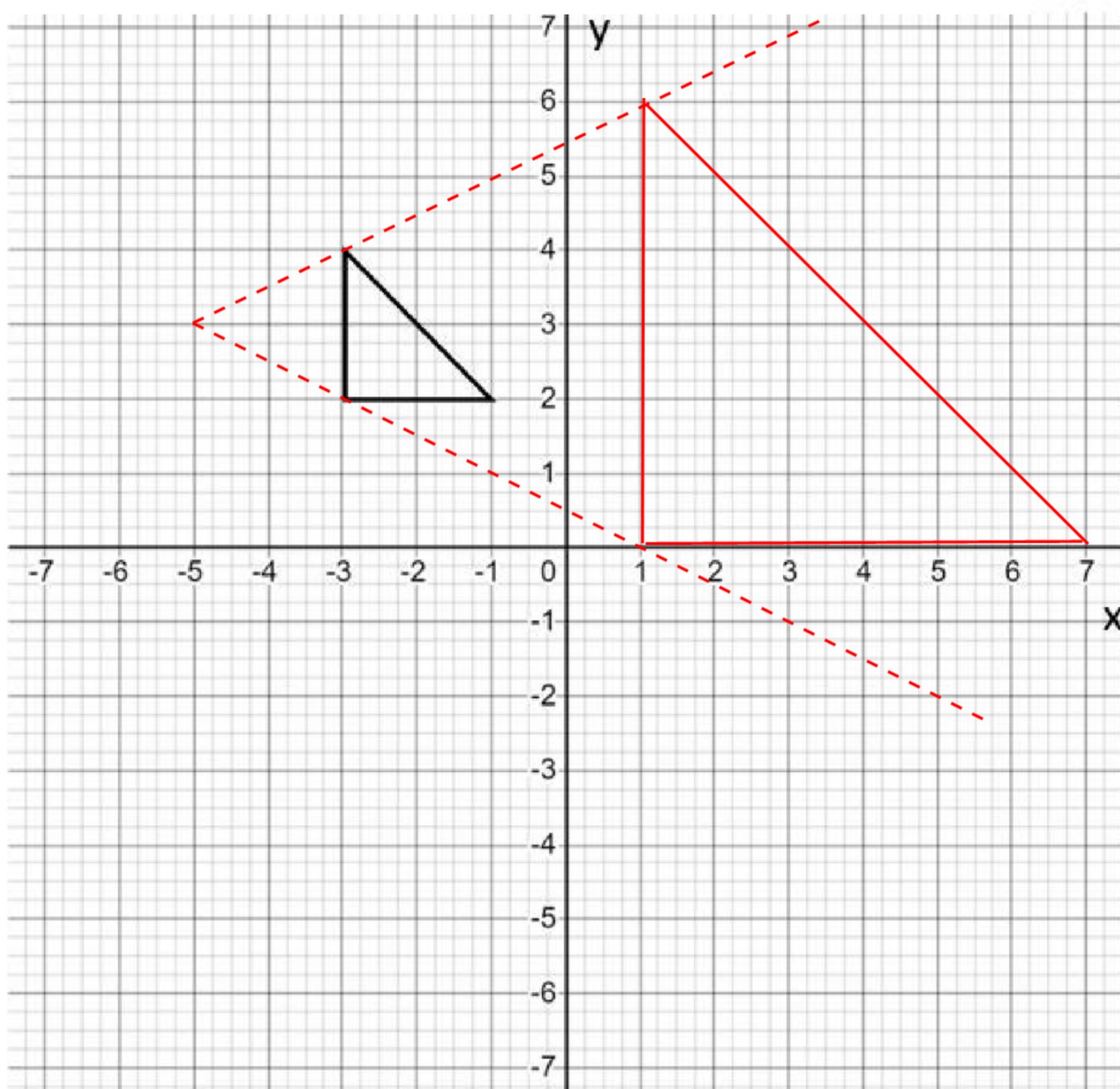


Answer: \_\_\_\_\_

(3 marks)



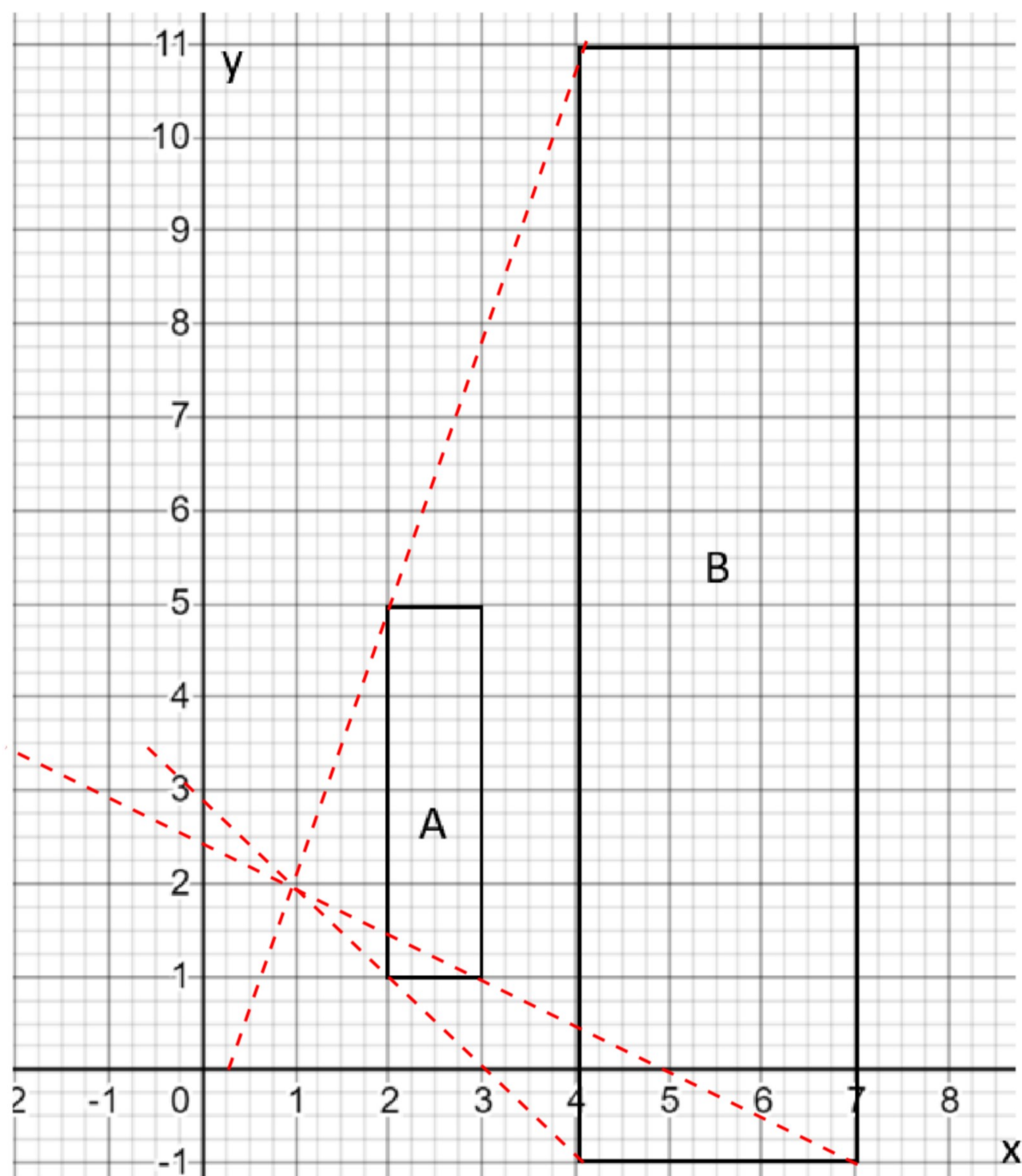
Q4. Enlarge the shape shown by scale factor 3 about the point  $(-5, 3)$ .



Answer: \_\_\_\_\_  
(3 marks)



Q5. Describe fully the transformation which takes shape A to B.



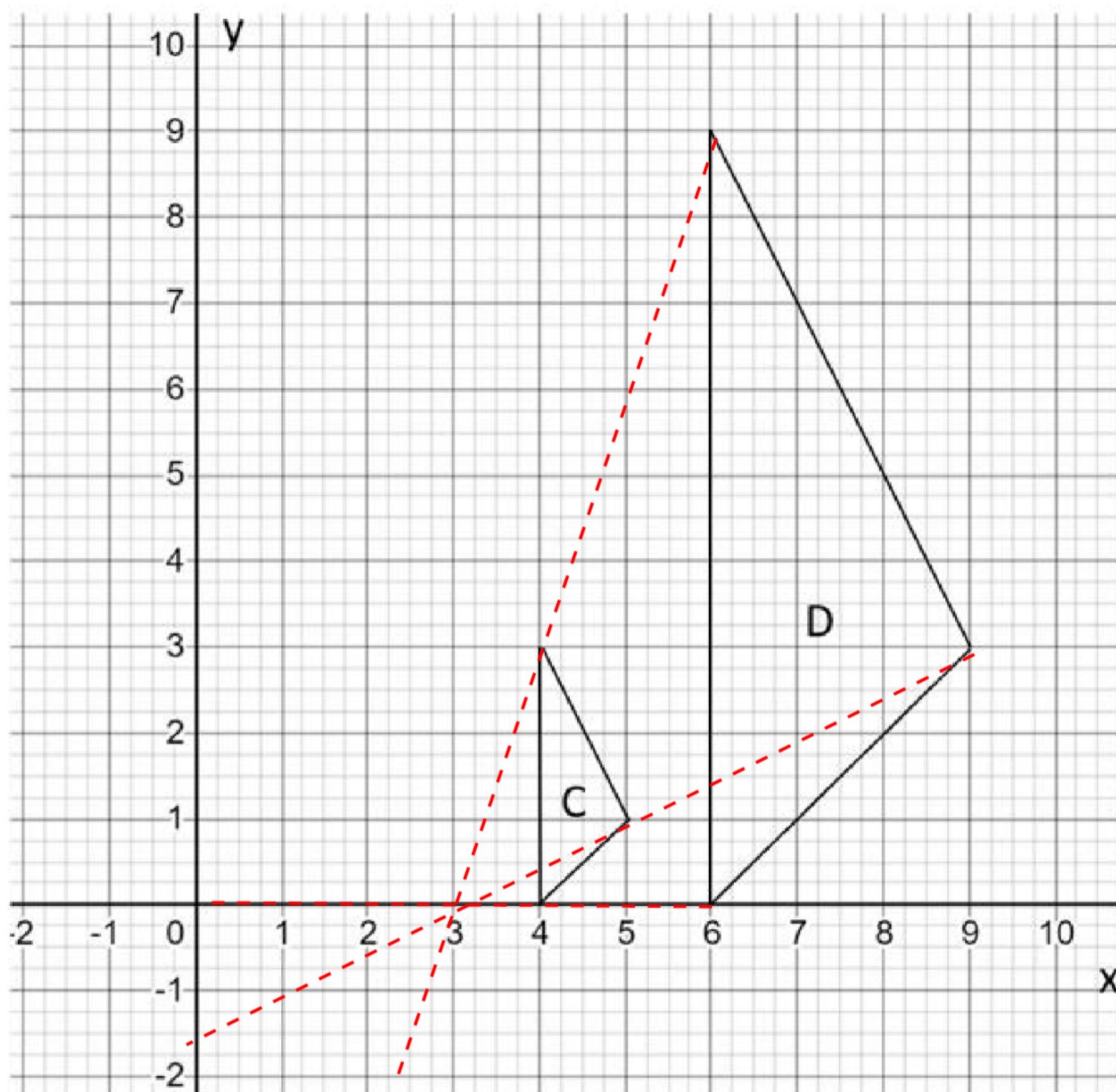
- Enlargement
- Scale factor 3
- Centre  $(1, 2)$

Answer: \_\_\_\_\_

(3 marks)



Q6. Describe fully the transformation which takes shape D to C.



- Enlargement
- Scale Factor 3
- Centre (3, 0)

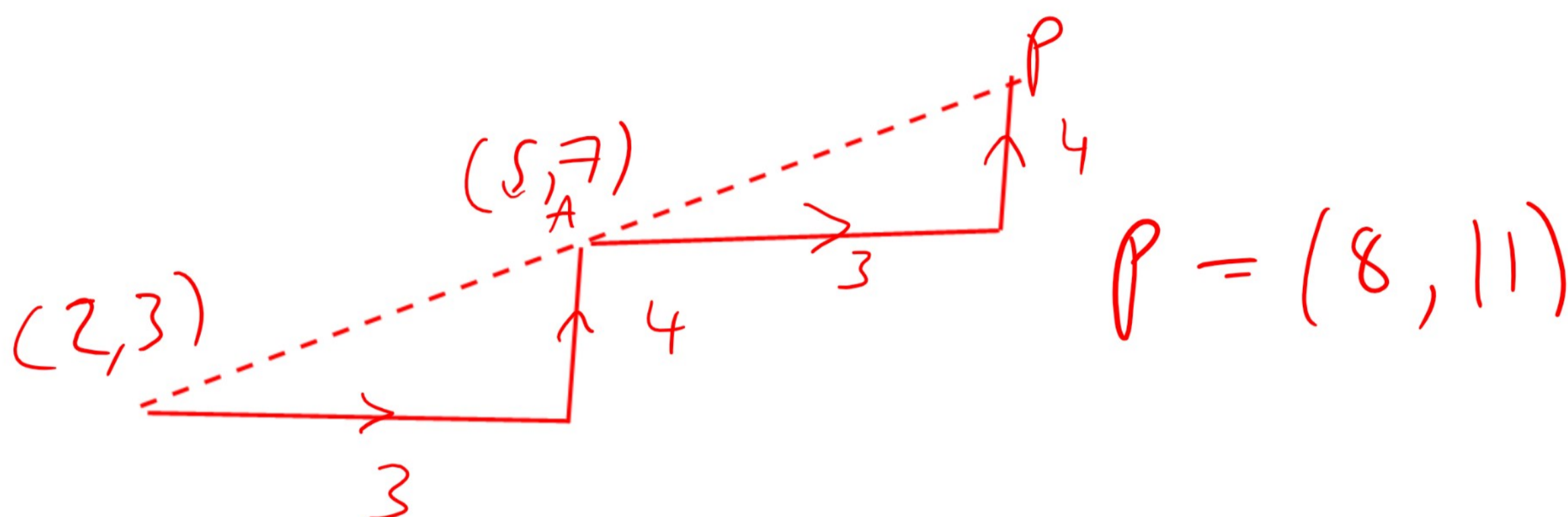
Answer: \_\_\_\_\_

(3 marks)



Q7. A shape ABC is to be enlarged about the point (2,3) using a scale factor of 2 to form the shape PQR.

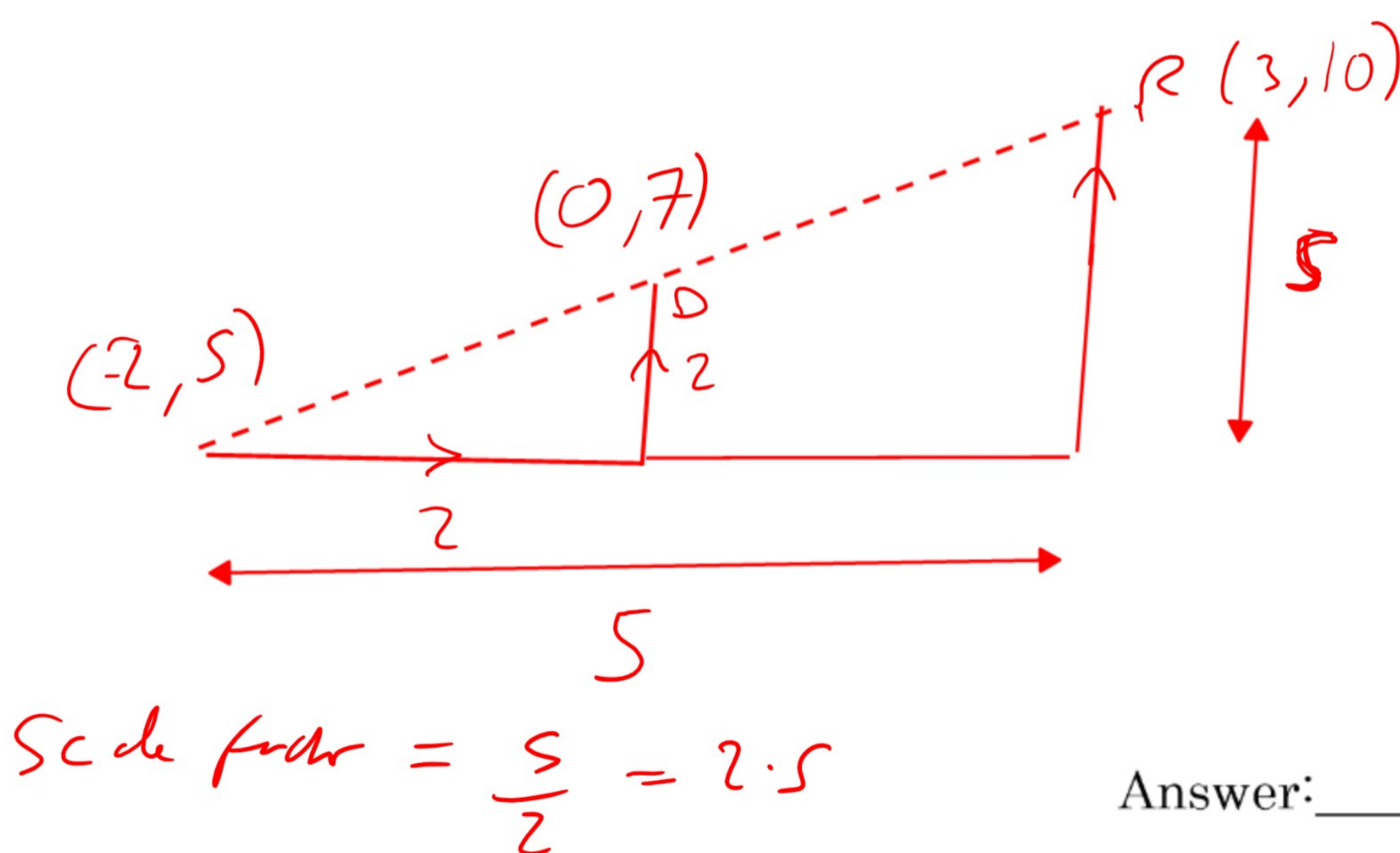
If A is the point (5, 7), work out the co-ordinates of point P.



Answer: (8, 11)  
(2 marks)

Q8. A shape DEF is to be enlarged about the point (-2,5) using a scale factor  $n$  to form the shape RST.

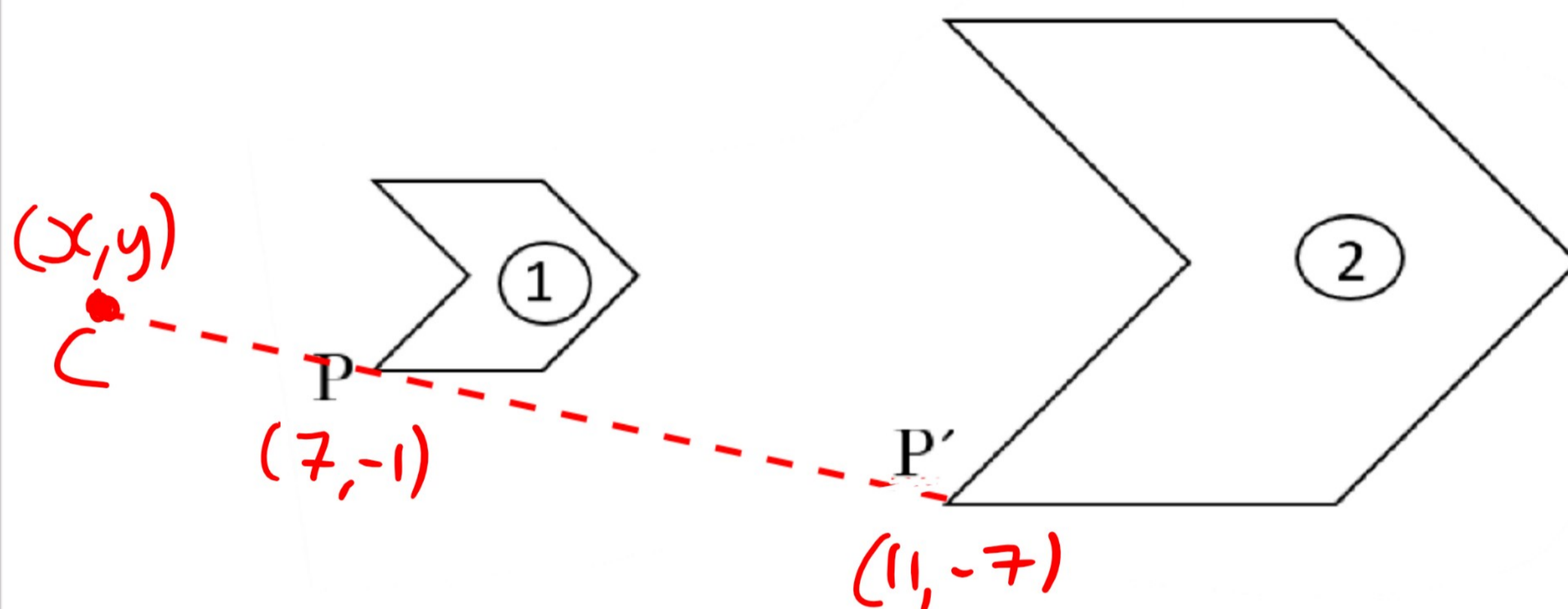
If D is the point (0, 7), and R is the point (3,10) work out the value of  $n$ .



Answer: 2.5  
(2 marks)



Q9. Below is a sketch of an enlargement. Shape 2 is an enlargement of shape 1, by scale factor 3. Given that  $P = (7, -1)$  and  $P' = (11, -7)$ , work out the co-ordinates of the centre of enlargement.



$$\vec{PP'} = \begin{pmatrix} 4 \\ -6 \end{pmatrix}, \quad \vec{CP} = \frac{1}{2} \begin{pmatrix} 4 \\ -6 \end{pmatrix}$$
$$= \begin{pmatrix} 2 \\ -3 \end{pmatrix}$$

$$\text{So } \vec{PC} = \begin{pmatrix} -2 \\ 3 \end{pmatrix} \text{ and } C = (5, 2)$$

Answer: (5, 2)  
(3 marks)