



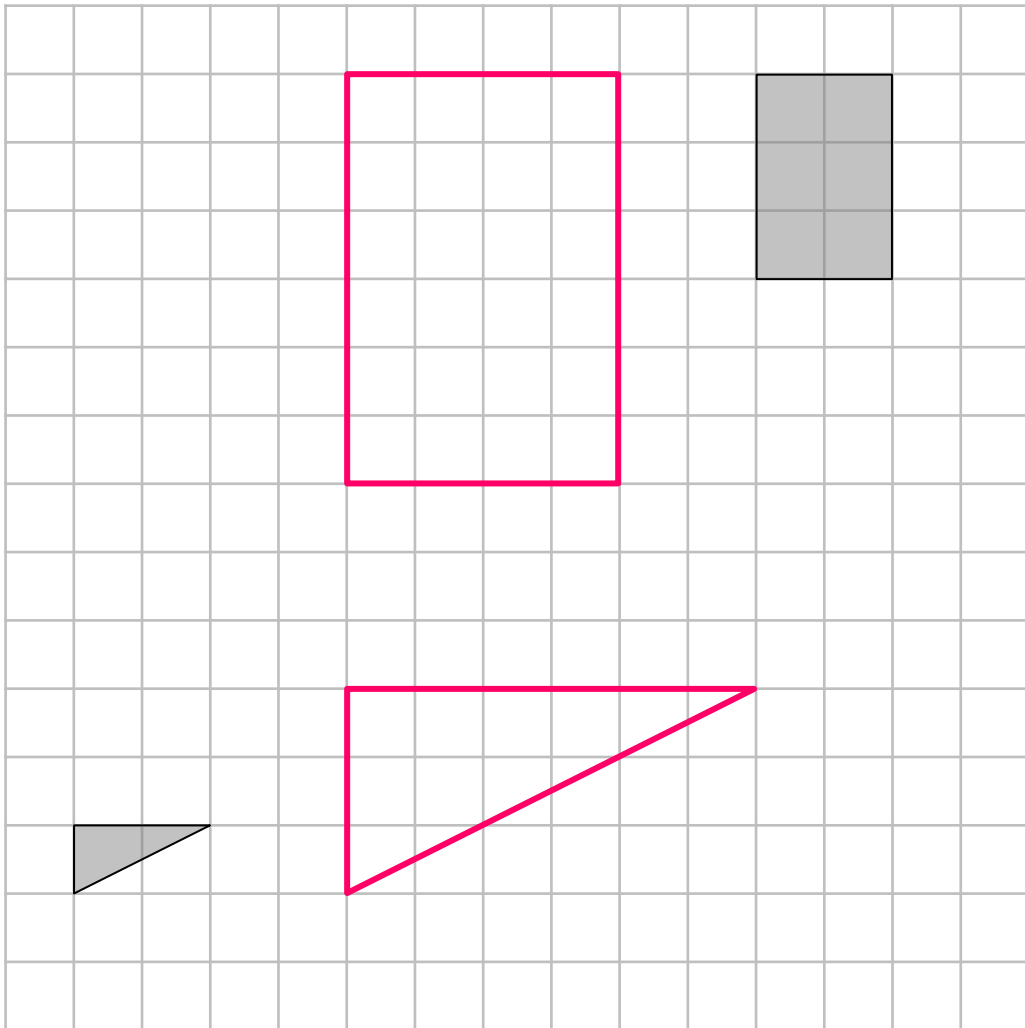
# Enlargements



**REVISE THIS TOPIC**

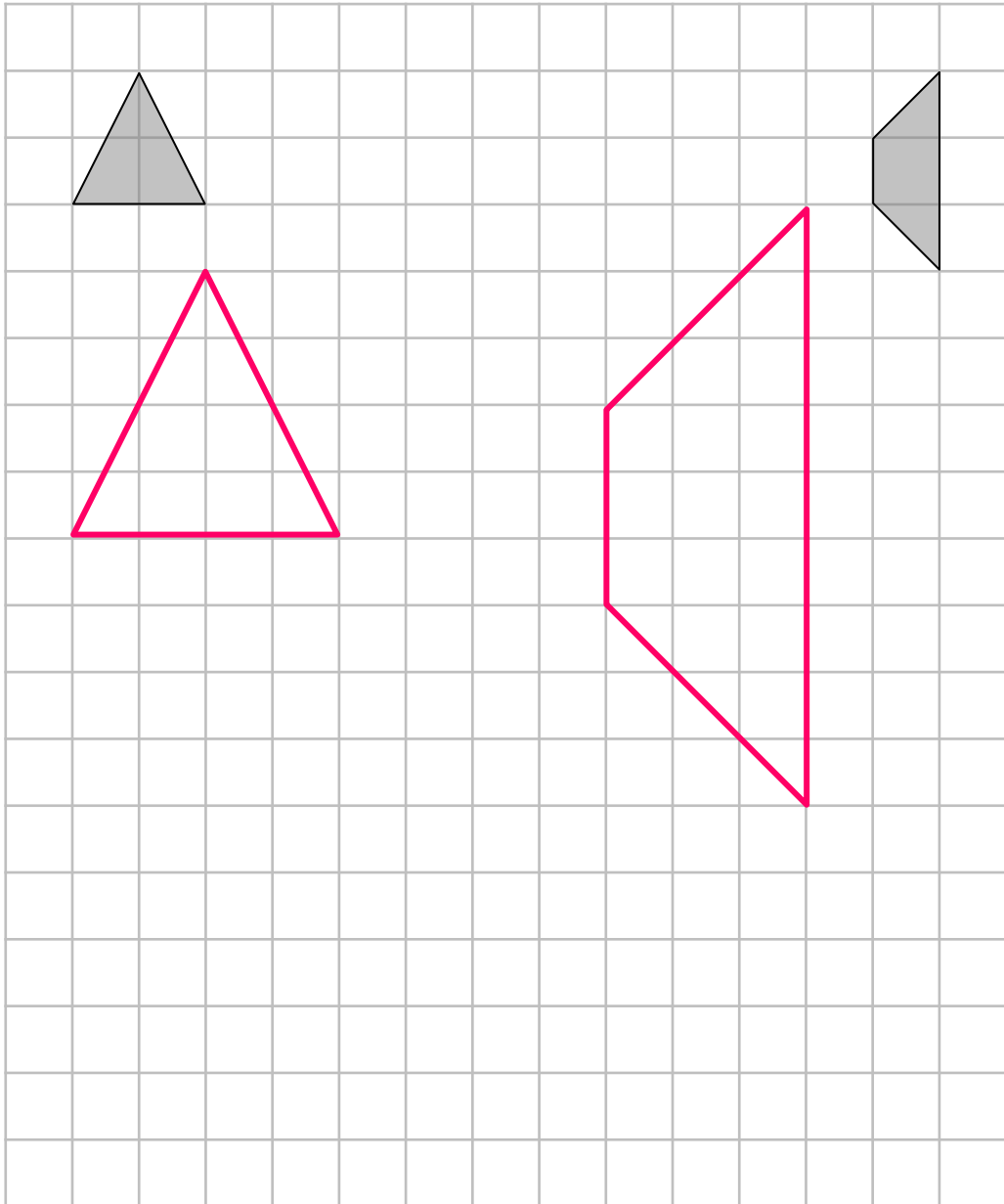


- 1 (a) On the grid, draw an enlargement of the rectangle with scale factor 2. [2 marks]
- 1 (b) On the grid, draw an enlargement of the triangle with scale factor 3. [2 marks]



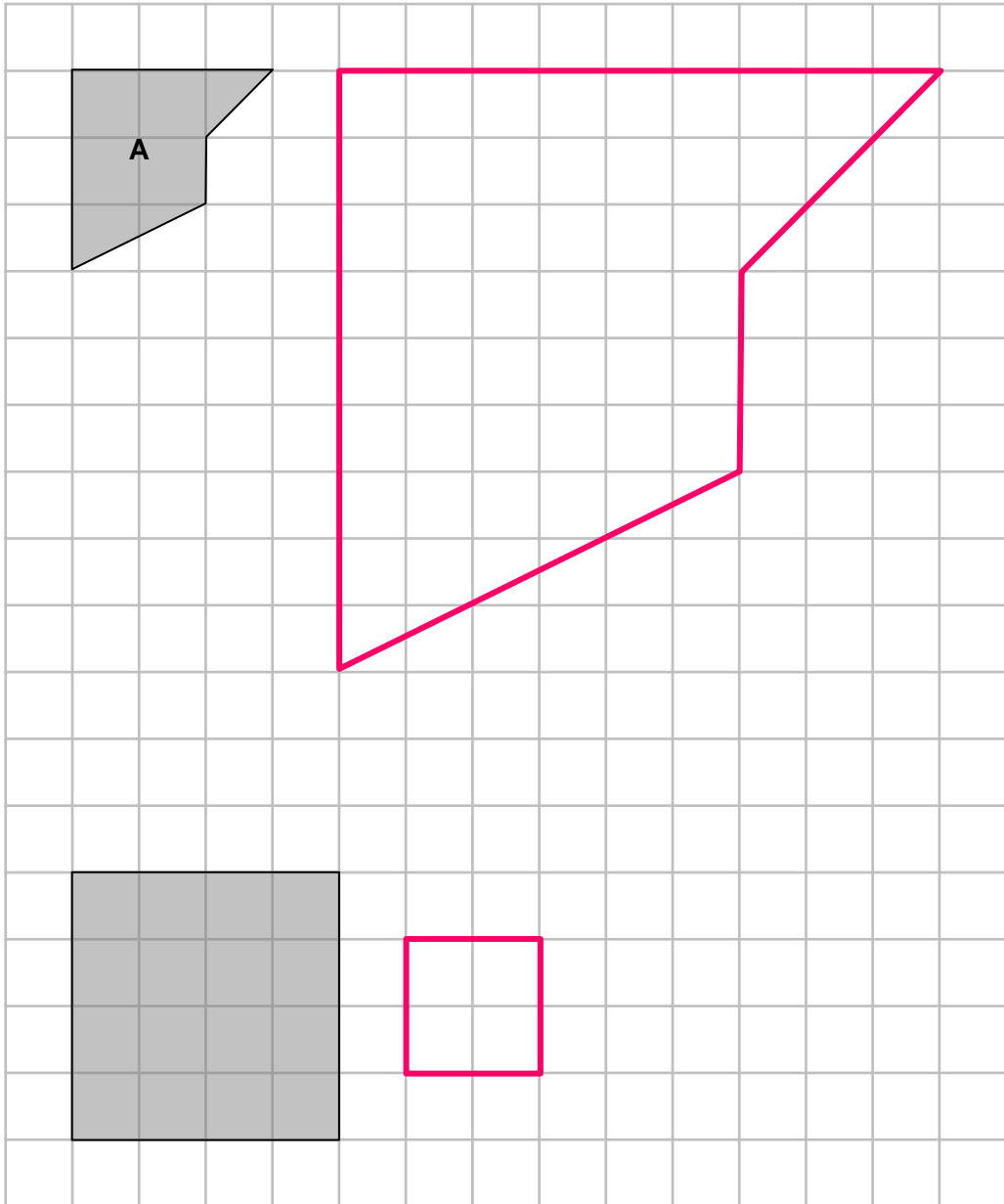
2 (a) On the grid, draw an enlargement of the triangle with scale factor 2. [2 marks]

2 (b) On the grid, draw an enlargement of the trapezium with scale factor 3. [2 marks]



3 (a) On the grid, draw an enlargement of shape **A** with scale factor 3. [3 marks]

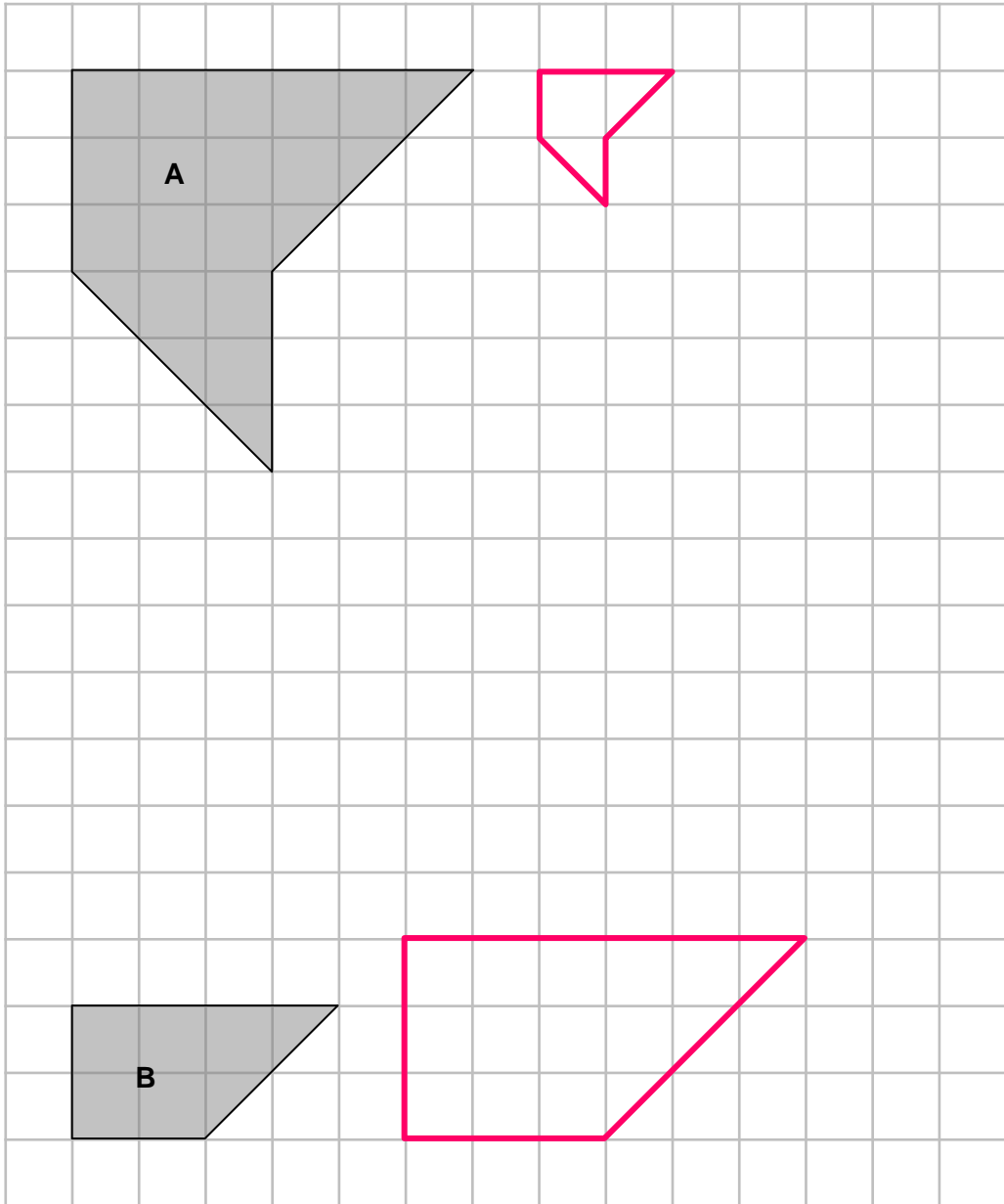
3 (b) On the grid, draw an enlargement of the square with scale factor  $\frac{1}{2}$  [1 mark]





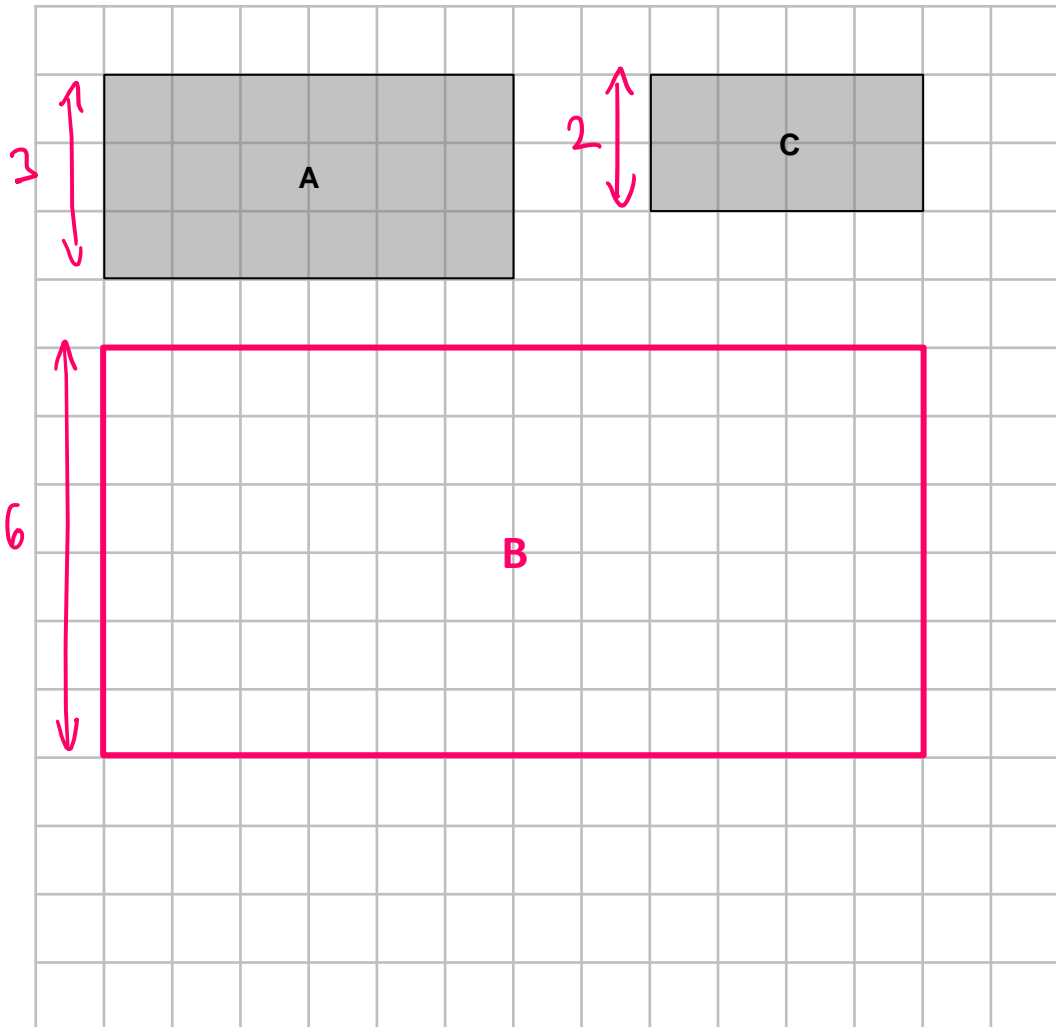
4 (a) On the grid, draw an enlargement of shape **A** with scale factor  $\frac{1}{3}$  [3 marks]

4 (b) On the grid, draw an enlargement of shape **B** with scale factor  $1\frac{1}{2}$  [2 marks]





5 Shape **A** is enlarged by scale factor 2 to give shape **B**.  
Shape **B** is enlarged to give shape **C**.



Work out the scale factor of enlargement from shape **B** to shape **C**. [2 marks]

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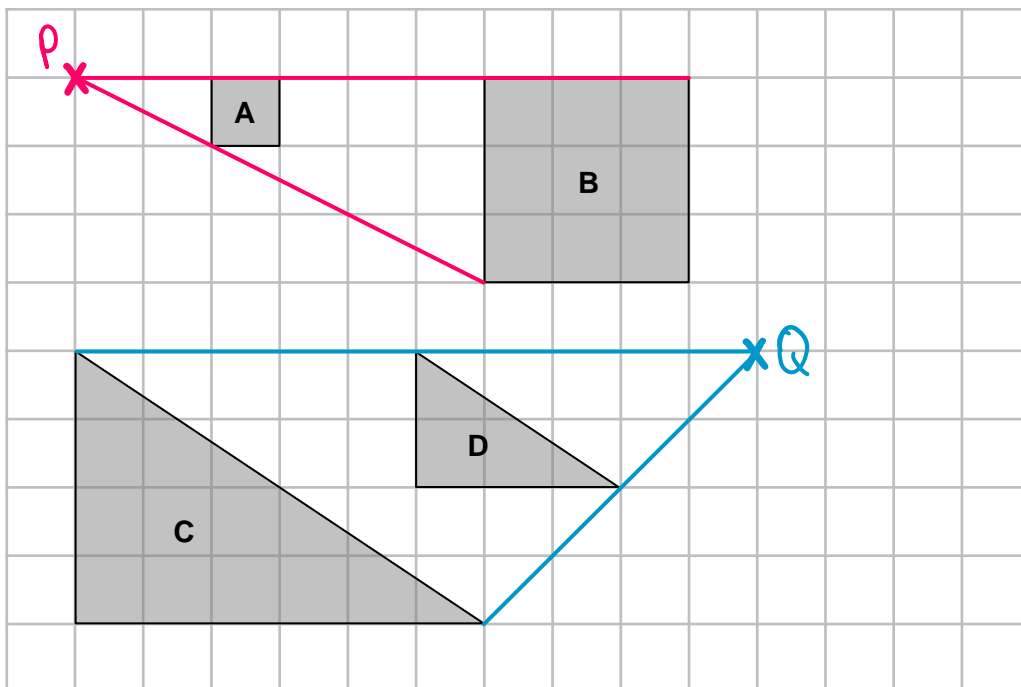
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Answer                     

$\frac{1}{3}$



- 6 Shape **A** is enlarged to give shape **B**.  
Shape **C** is enlarged to give shape **D**.



- 6 (a) Complete the statements below. [2 marks]

Shape **A** has been enlarged by scale factor 3 to give shape **B**.

Shape **C** has been enlarged by scale factor  $\frac{1}{2}$  to give shape **D**.

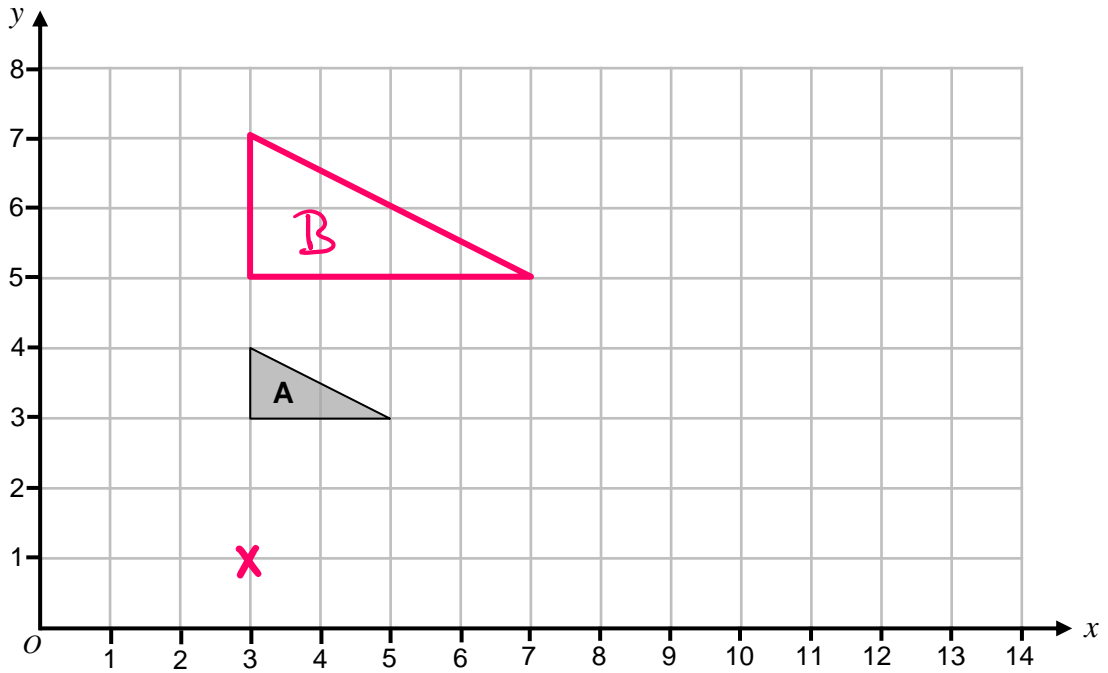
- 6 (b) Mark with a cross ( $\times$ ), the centre of enlargement, for the enlargement from shape **A** to shape **B**. Label this point **P**. [1 mark]

- 6 (c) Mark with a cross ( $\times$ ), the centre of enlargement, for the enlargement from shape **C** to shape **D**. Label this point **Q**. [1 mark]

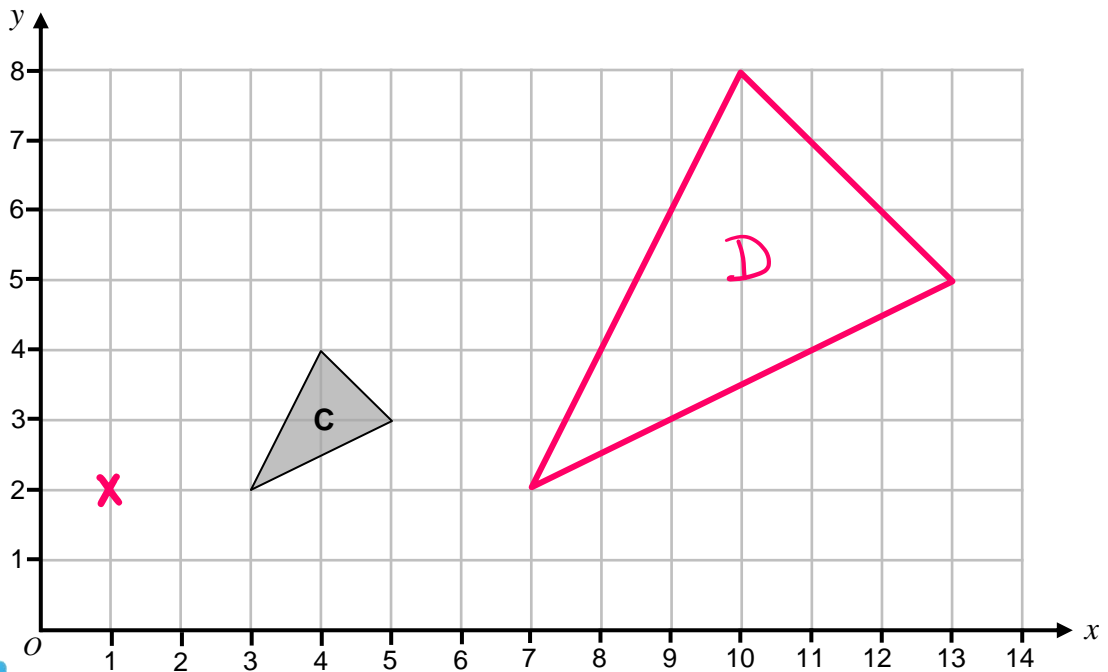




- 7 (a) Enlarge shape **A** by scale factor 2 with centre of enlargement (3, 1) [2 marks]  
Label the image shape **B**.

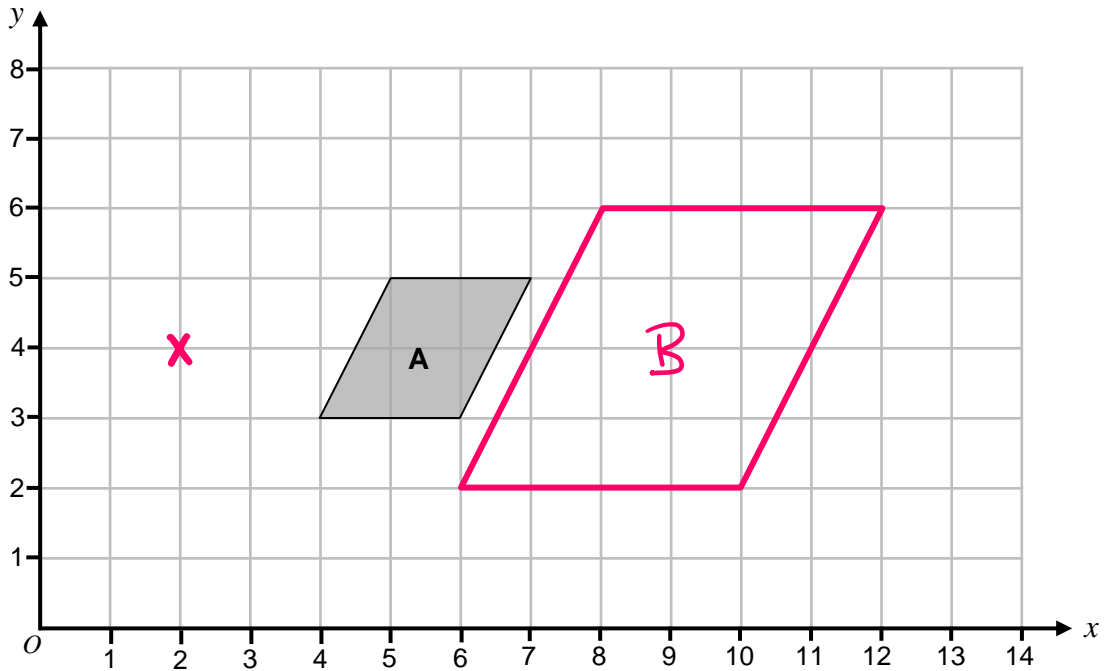


- 7 (b) Enlarge shape **C** by scale factor 3 with centre of enlargement (1, 2) [2 marks]  
Label the image shape **D**.

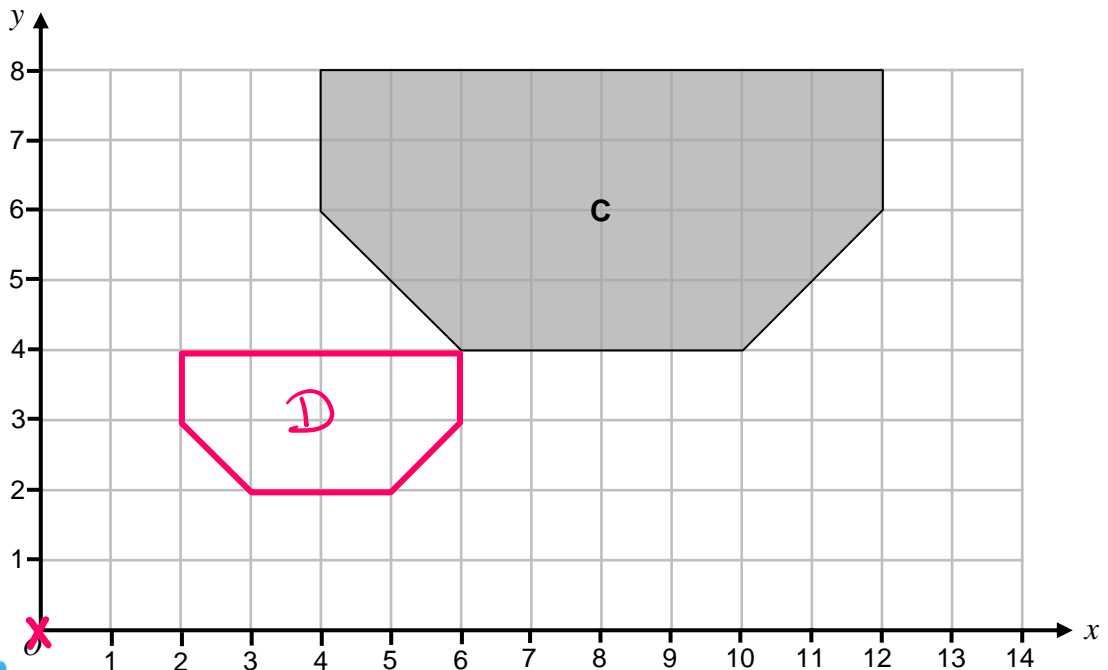




- 8 (a) Enlarge shape **A** by scale factor 2 with centre of enlargement (2, 4) [2 marks]  
Label the image shape **B**.

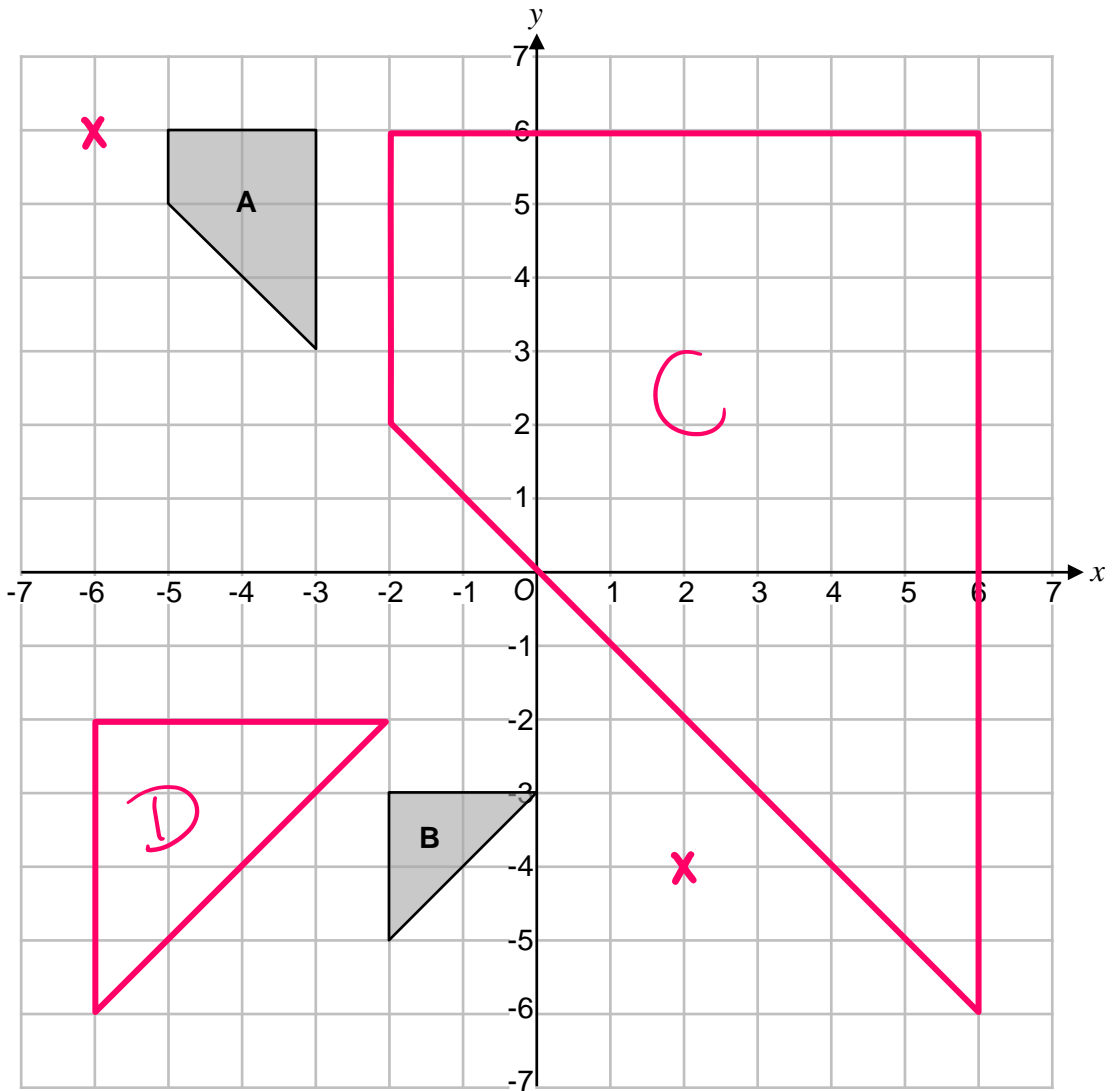


- 8 (b) Enlarge shape **C** by scale factor 0.5 with centre of enlargement (0, 0) [2 marks]  
Label the image shape **D**.





9 Shape **A** and Shape **B** are shown on the grid below.

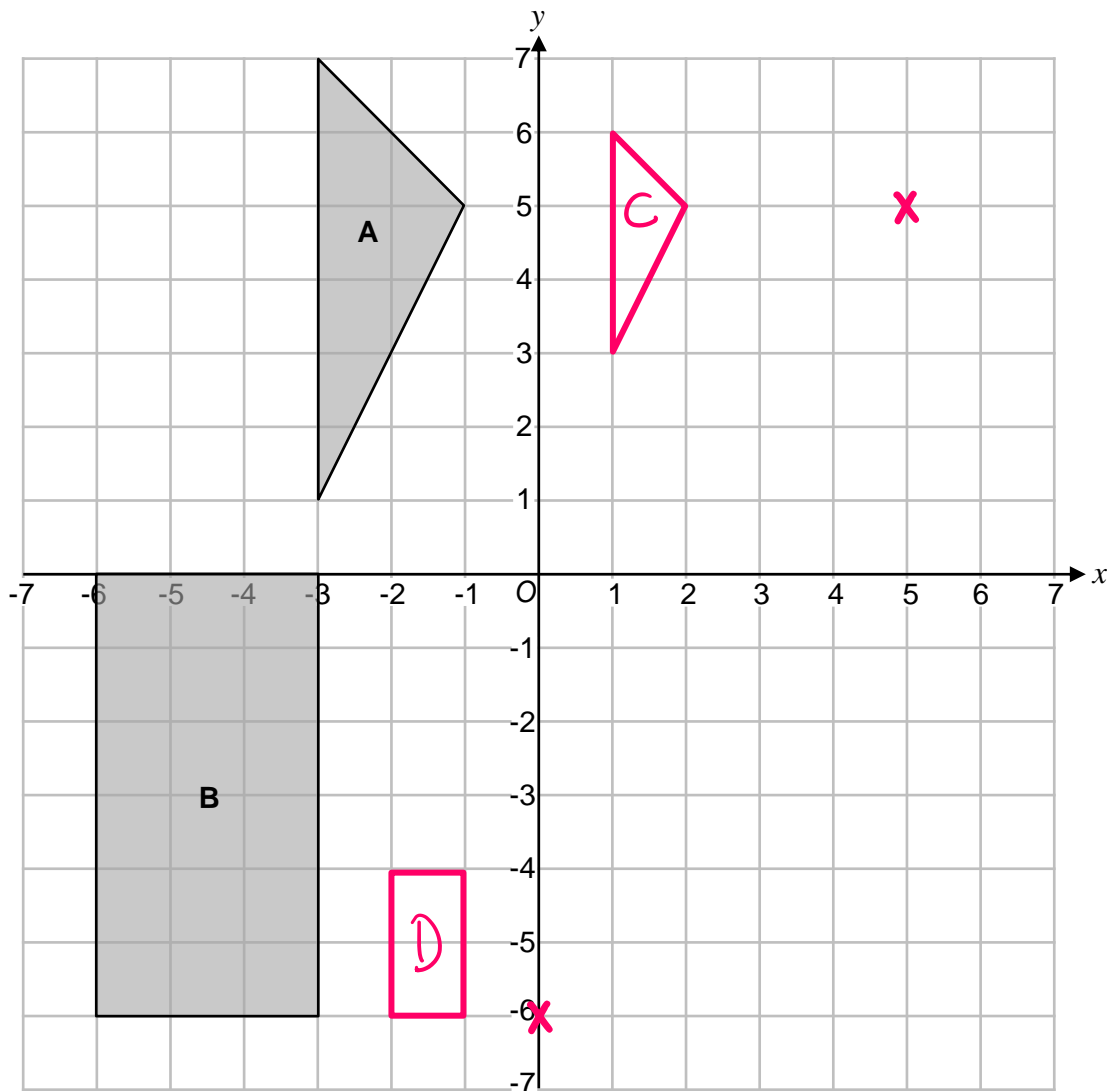


9 (a) Enlarge shape **A** by scale factor 4 with centre of enlargement  $(-6, 6)$  [2 marks]  
Label the image shape **C**.

9 (b) Enlarge shape **B** by scale factor 2 with centre of enlargement  $(2, -4)$  [2 marks]  
Label the image shape **D**.



10 Shape **A** and Shape **B** are shown on the grid below.

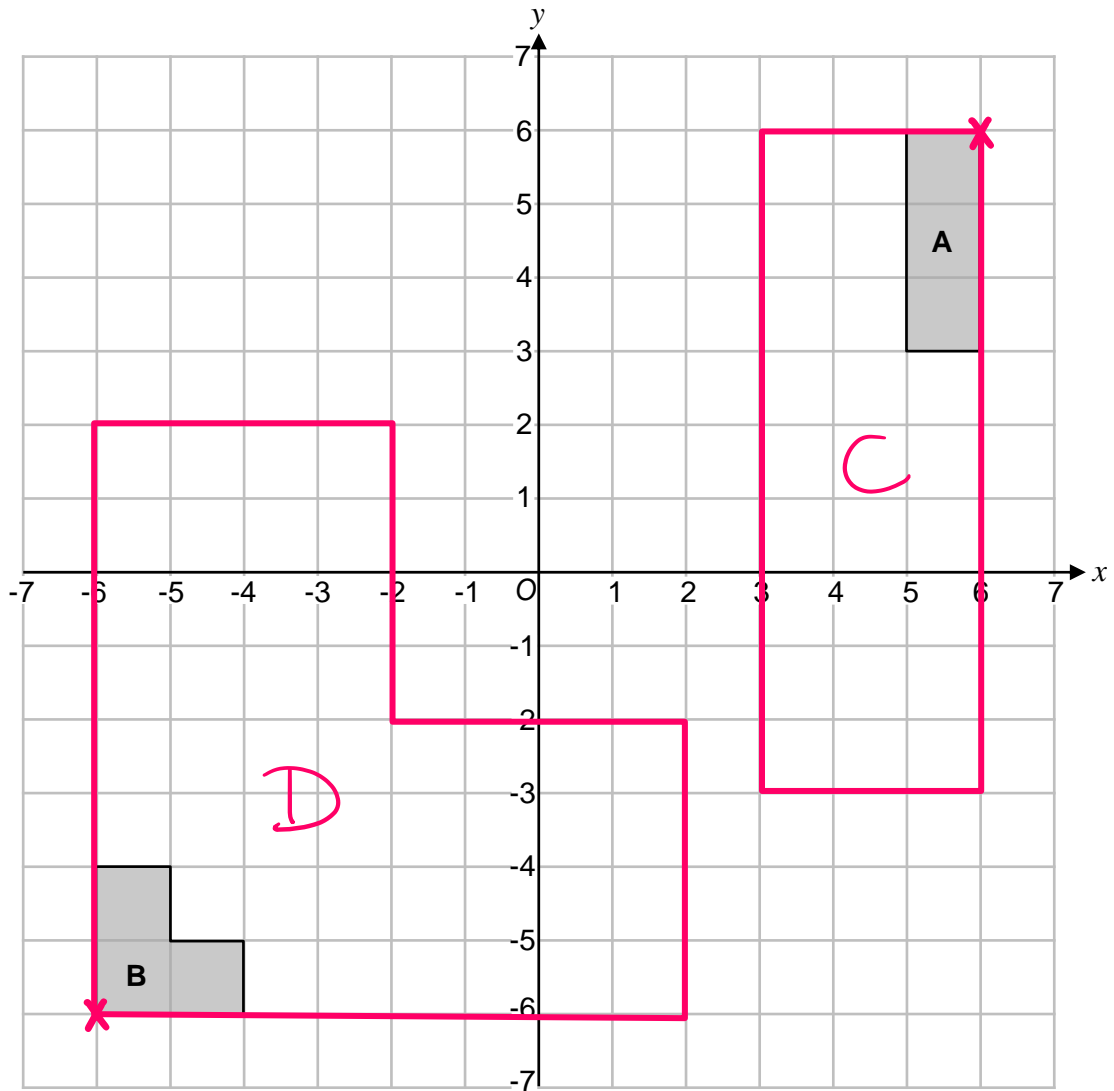


10 (a) Enlarge shape **A** by scale factor  $\frac{1}{2}$  with centre of enlargement (5, 5) [2 marks]  
Label the image shape **C**.

10 (b) Enlarge shape **B** by scale factor  $\frac{1}{3}$  with centre of enlargement (0, -6) [2 marks]  
Label the image shape **D**.



11 Shape **A** and Shape **B** are shown on the grid below.



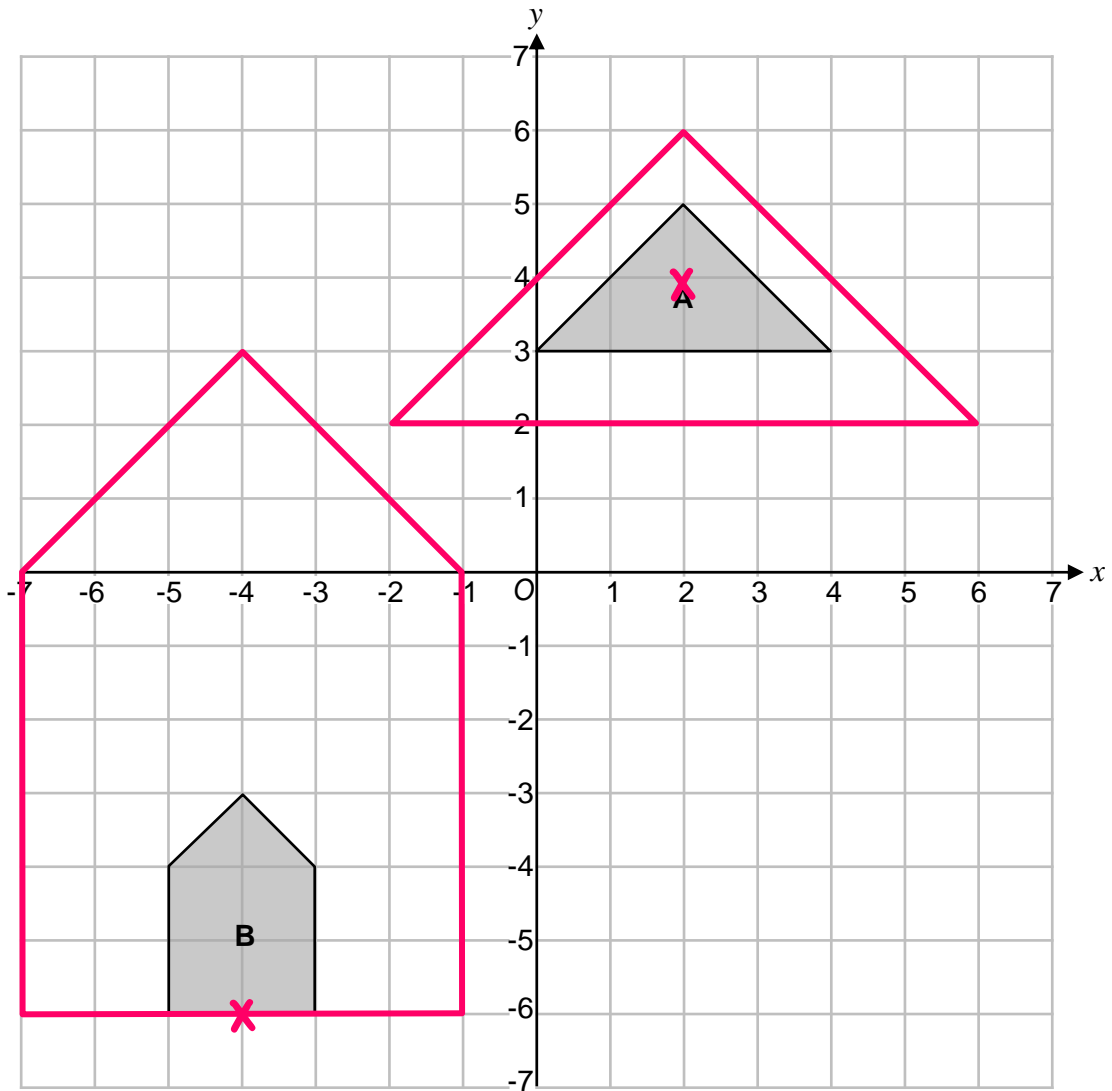
11 (a) Enlarge shape **A** by scale factor 3 with centre of enlargement (6, 6) [2 marks]  
Label the image shape **C**.

11 (b) Enlarge shape **B** by scale factor 4 with centre of enlargement (-6, -6) [2 marks]  
Label the image shape **D**.





12 Shape **A** and Shape **B** are shown on the grid below.



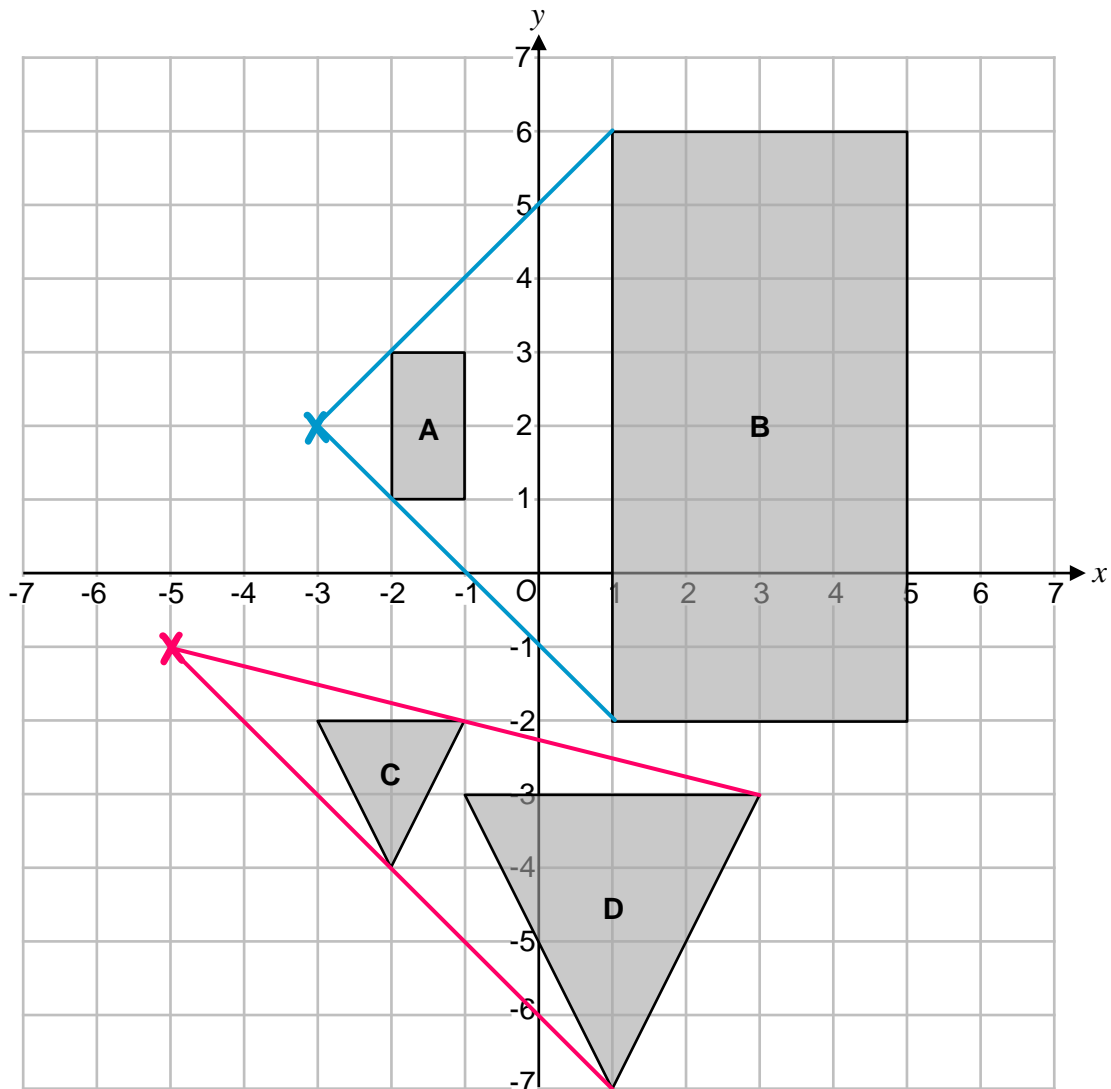
12 (a) Enlarge shape **A** by scale factor 2 with centre of enlargement (2, 4) [2 marks]  
Label the image shape **C**.

12 (b) Enlarge shape **B** by scale factor 3 with centre of enlargement (-4, -6) [2 marks]  
Label the image shape **D**.





13



13 (a) Describe fully the single transformation that maps shape A onto shape B. [3 marks]

Enlargement, scale factor 3,  
centre of enlargement (-3, 2)

13 (b) Describe fully the single transformation that maps shape C onto shape D. [3 marks]

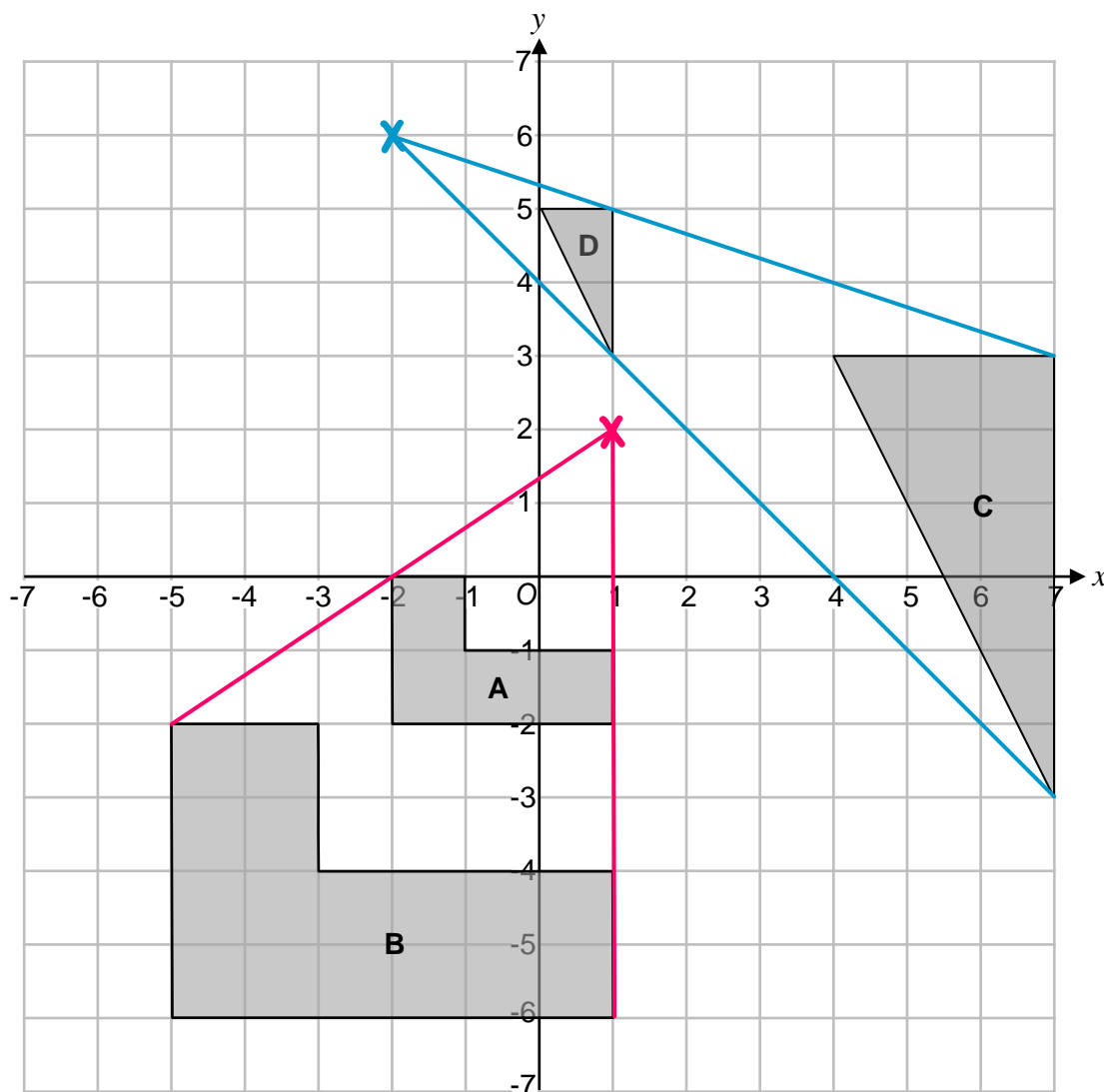
Enlargement, scale factor 2,  
centre of enlargement (-5, -1)



Turn over ►



14



14 (a) Describe fully the single transformation that maps shape A onto shape B. [3 marks]

Enlargement, scale factor 2,  
centre of enlargement (1, 2)

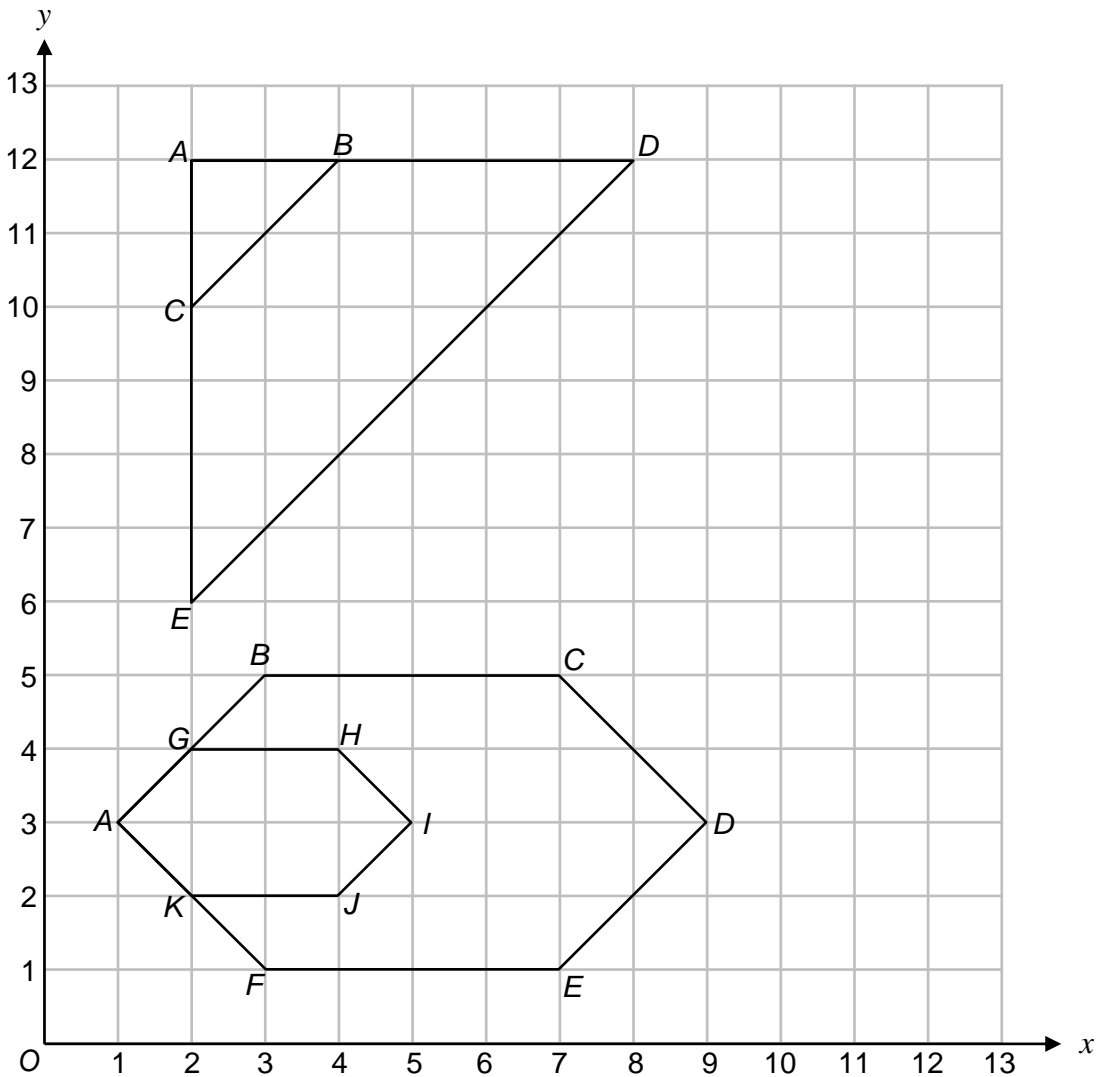
14 (b) Describe fully the single transformation that maps shape C onto shape D. [3 marks]

Enlargement, scale factor  $\frac{1}{3}$ ,  
centre of enlargement (-2, 6)





15



15 (a) Describe fully the single transformation that maps shape  $AGHIJK$  to shape  $ABCDEF$  [3 marks]

Enlargement, scale factor 2,  
centre of enlargement (1, 3)

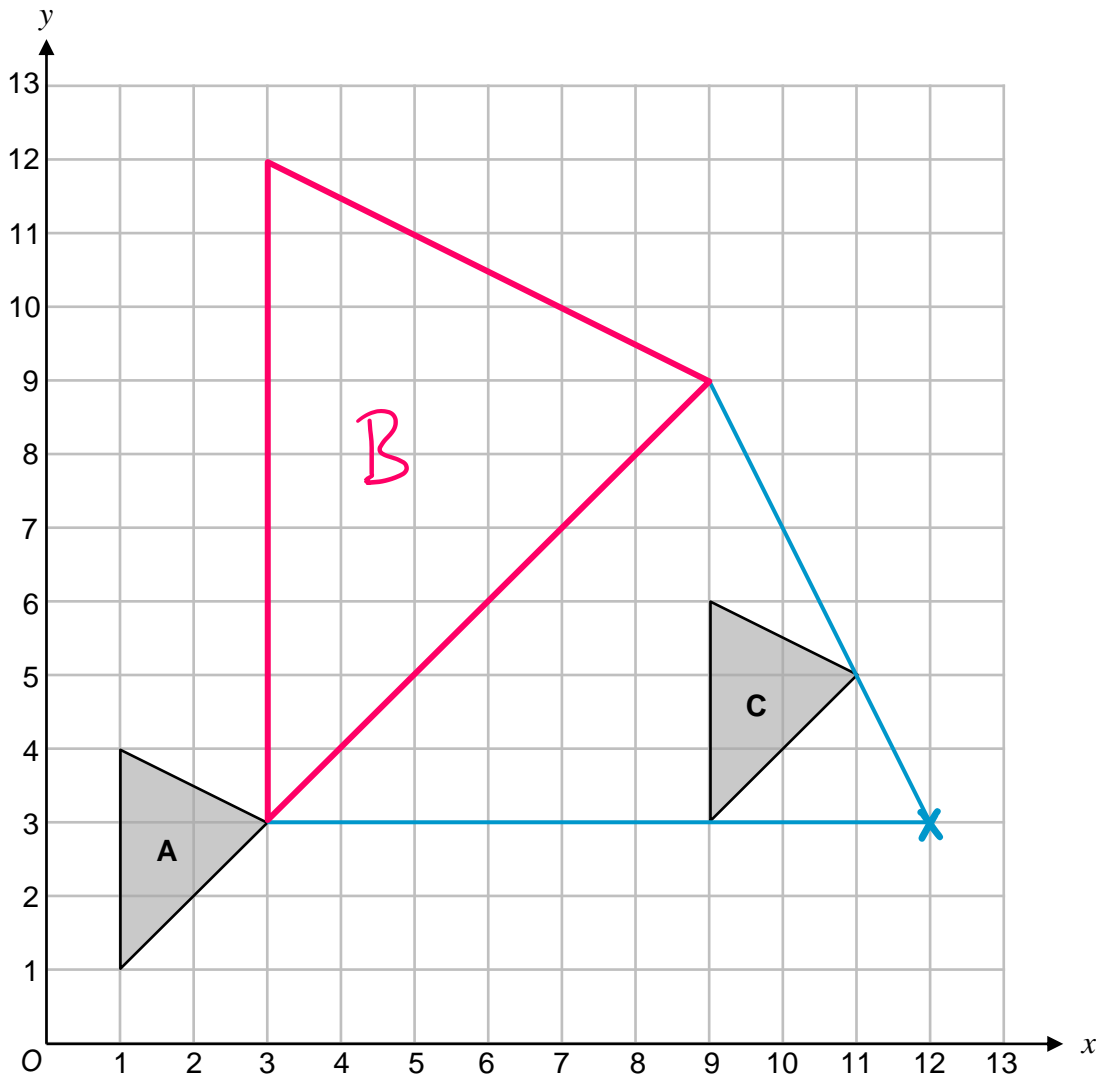
15 (b) Describe fully the single transformation that maps triangle  $ABC$  to triangle  $ADE$  [3 marks]

Enlargement, scale factor 3,  
centre of enlargement (2, 12)





16



Shape **A** is enlarged by scale factor 3 with centre of enlargement  $(0, 0)$  to shape **B**.

Shape **B** is enlarged to shape **C**.

Describe fully the single transformation that maps shape **B** onto shape **C**. [4 marks]

Enlargement, scale factor  $\frac{1}{3}$ ,  
centre of enlargement  $(12, 3)$



4