



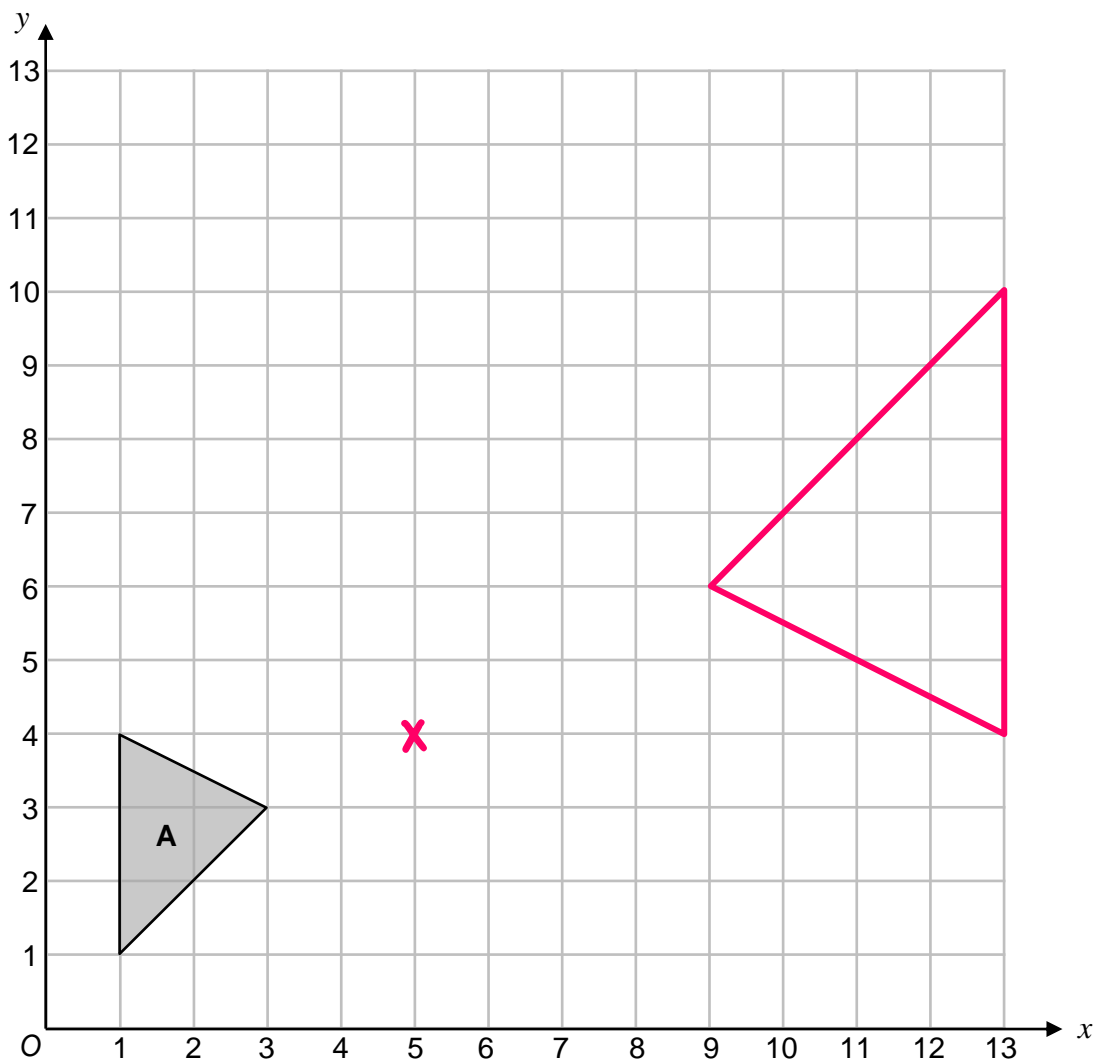
Enlargements (Negative SF)



REVISE THIS TOPIC



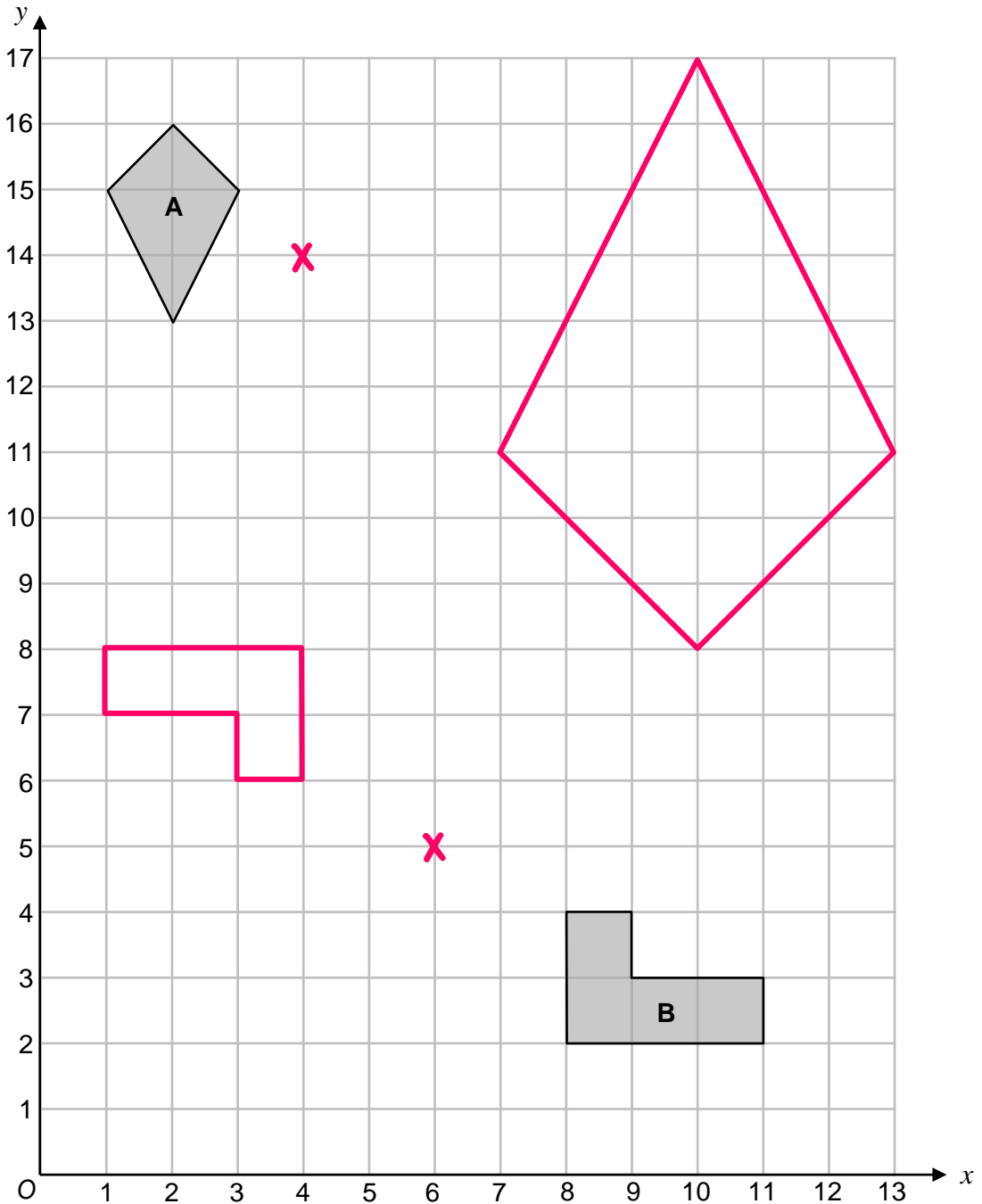
1 Enlarge triangle A by scale factor -2, centre (5, 4) [2 marks]





2 (a) Enlarge shape **A** by scale factor -3 , centre $(4, 14)$ [2 marks]

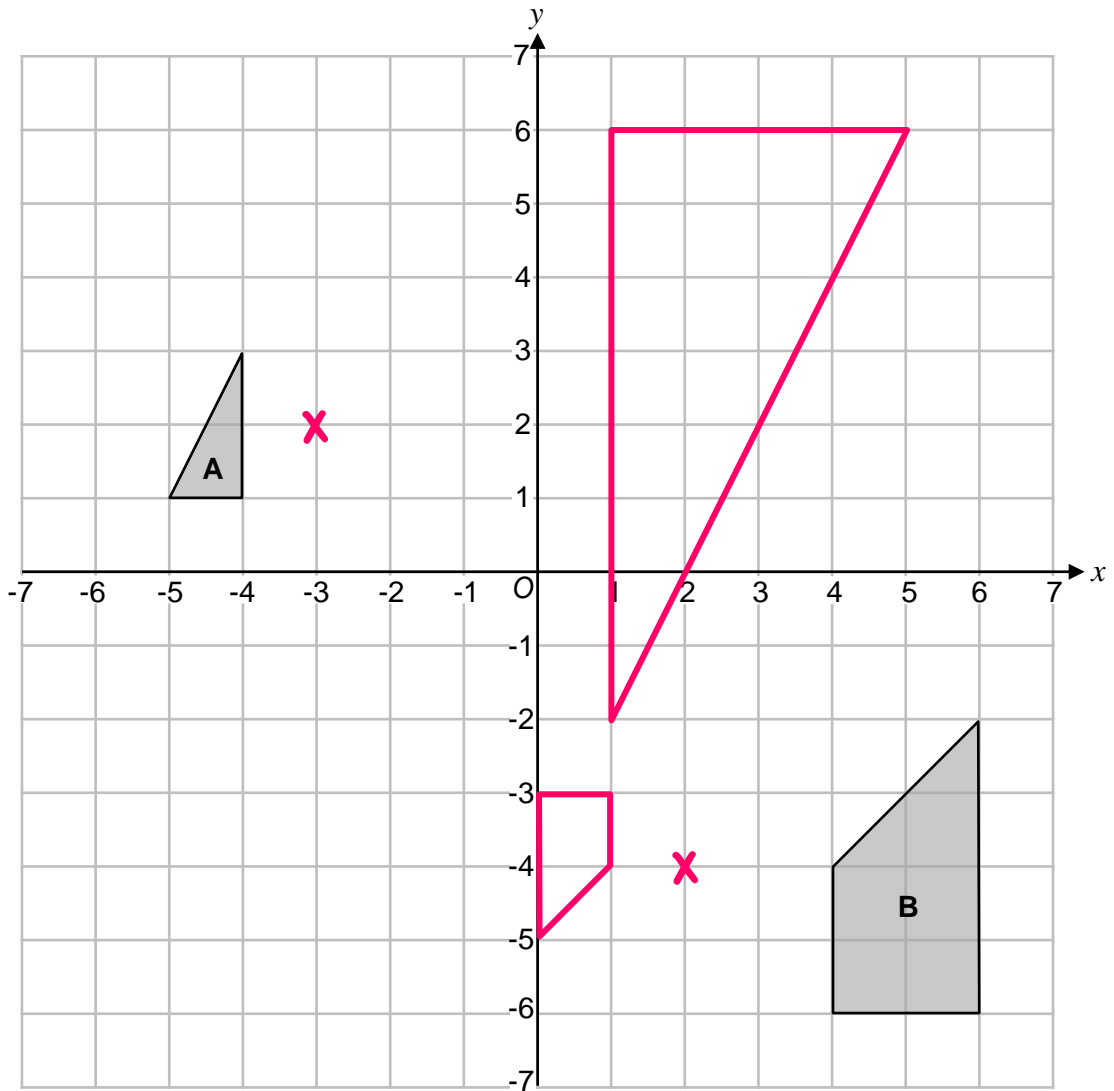
2 (b) Enlarge shape **B** by scale factor -1 , centre $(6, 5)$ [2 marks]





3 (a) Enlarge shape **A** by scale factor -4 , centre $(-3, 2)$ [2 marks]

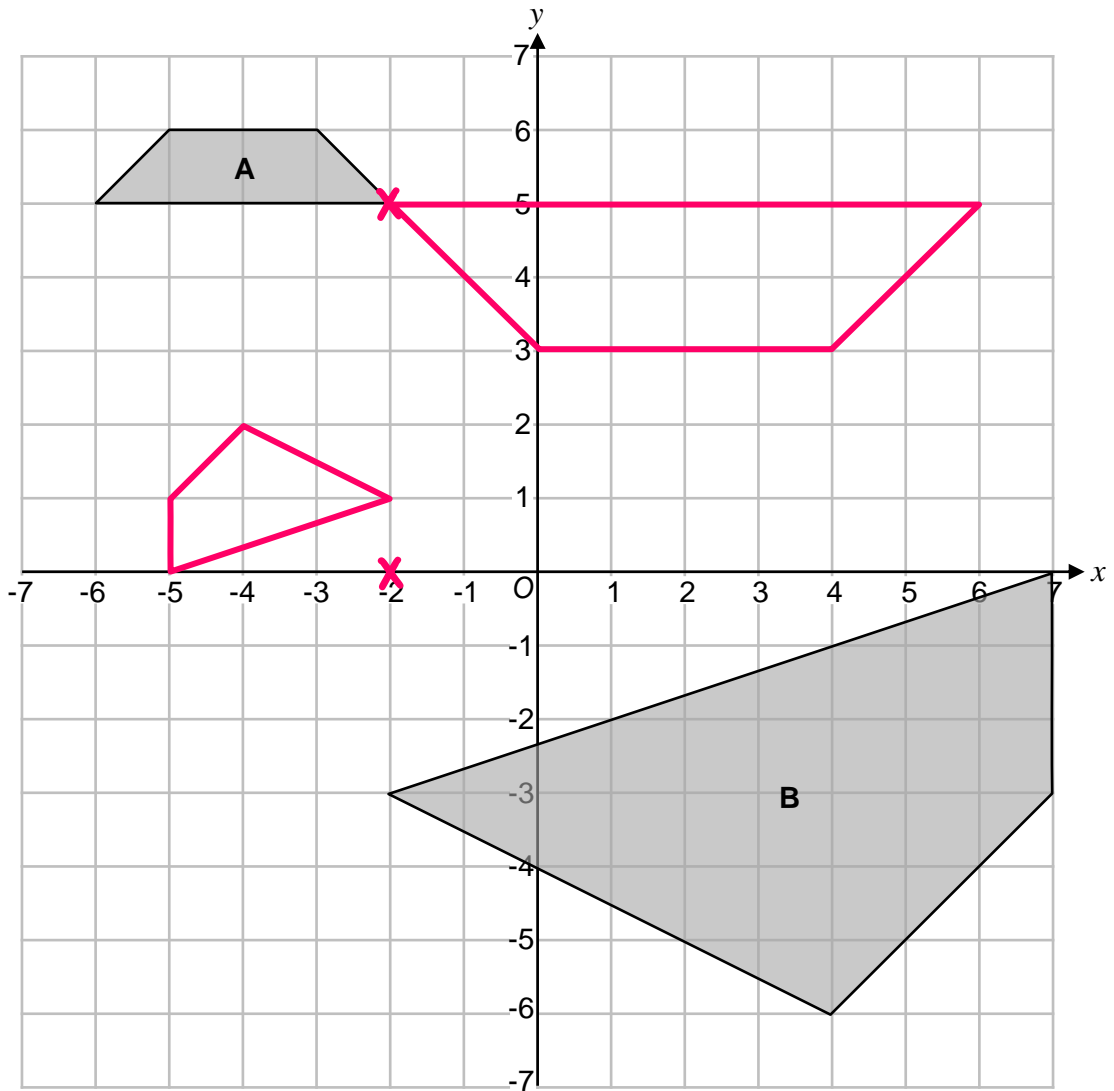
3 (b) Enlarge shape **B** by scale factor -0.5 , centre $(2, -4)$ [2 marks]





4 (a) Enlarge shape **A** by scale factor -2 , centre $(-2, 5)$ [2 marks]

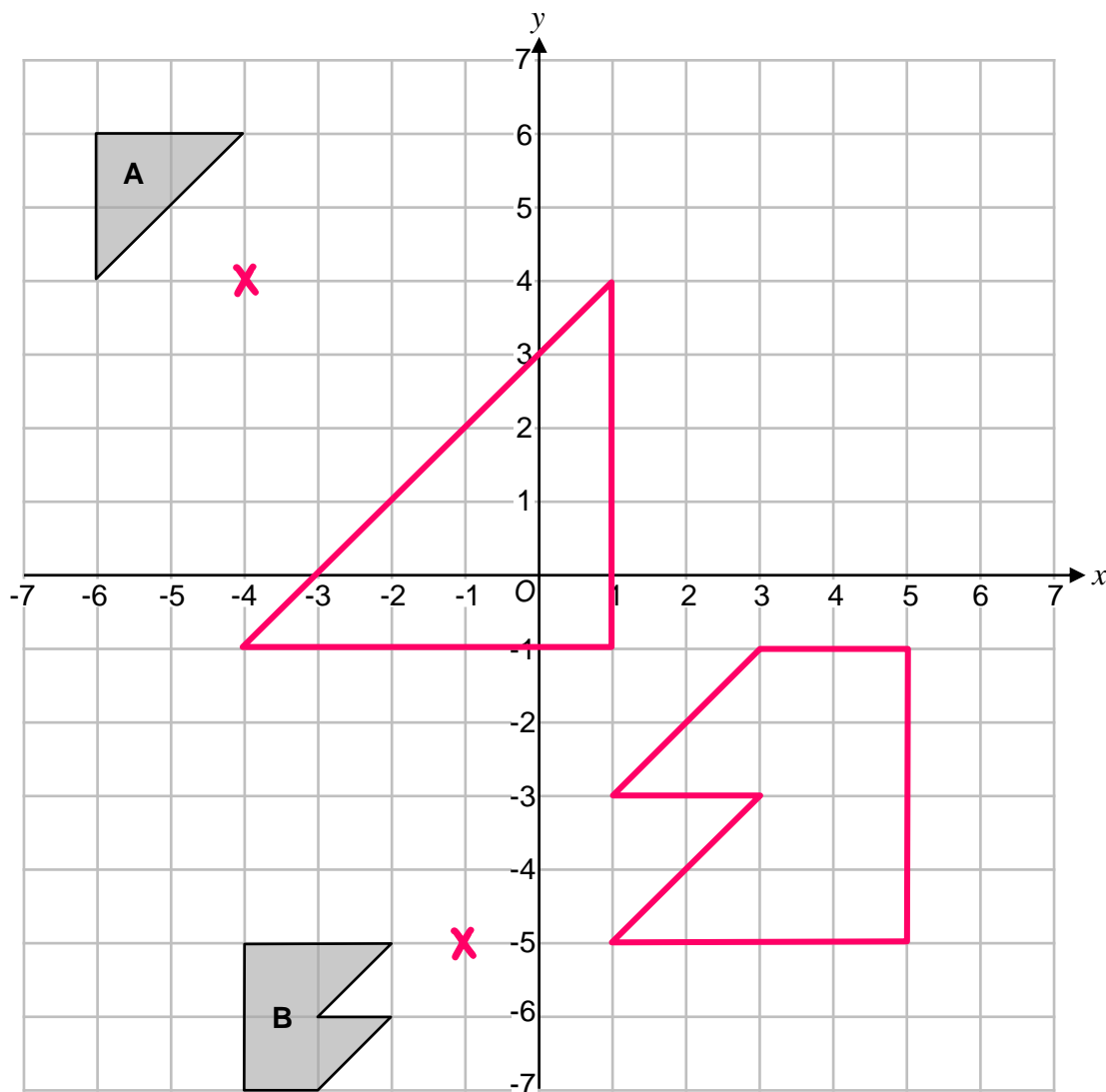
4 (b) Enlarge shape **B** by scale factor $-\frac{1}{3}$, centre $(-2, 0)$ [2 marks]





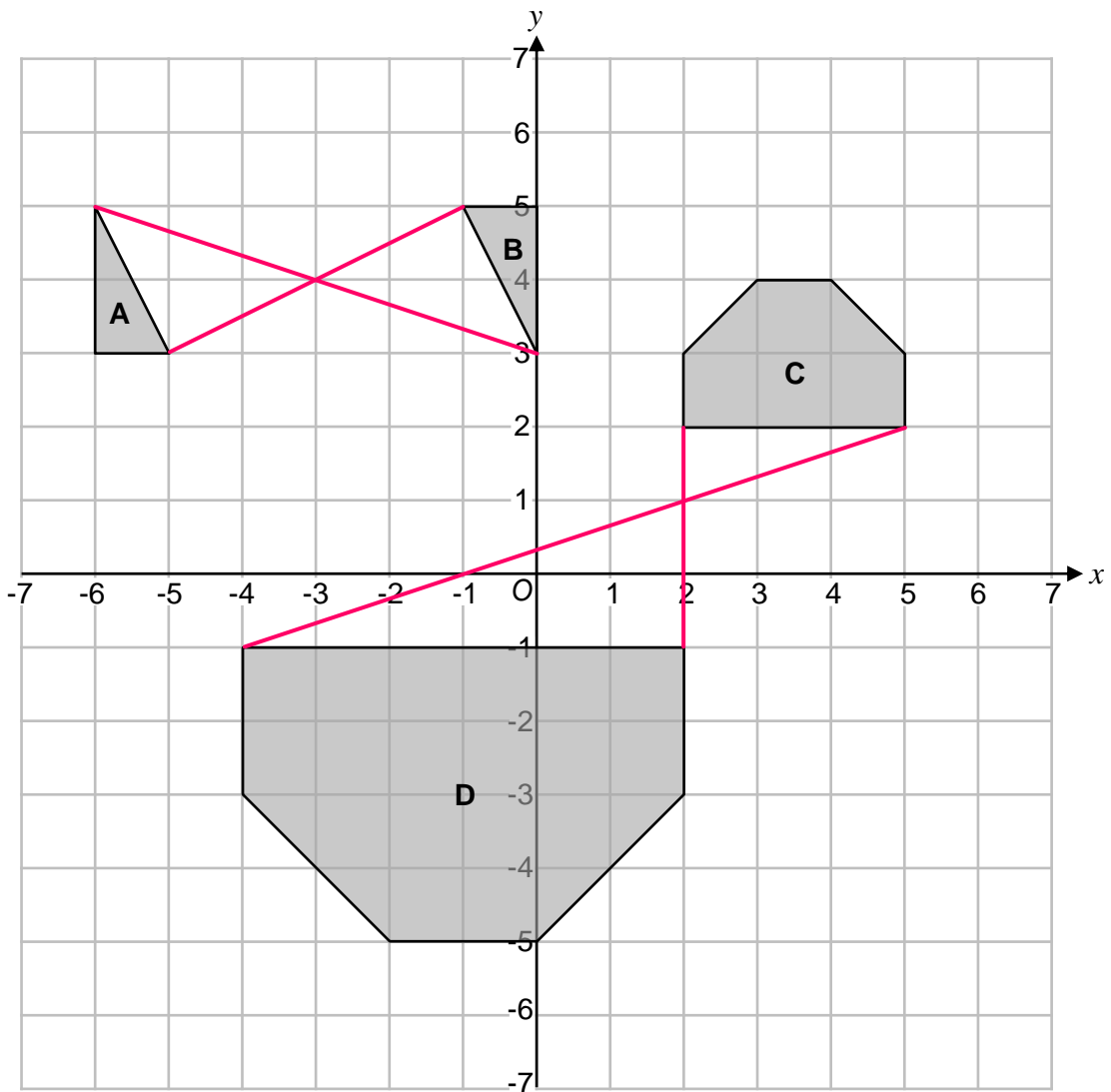
5 (a) Enlarge shape **A** by scale factor $-2\frac{1}{2}$, centre $(-4, 4)$ [2 marks]

5 (b) Enlarge shape **B** by scale factor -2 , centre $(-1, -5)$ [2 marks]





6



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

Enlargement, scale factor -1
Centre of enlargement $(-3, 4)$

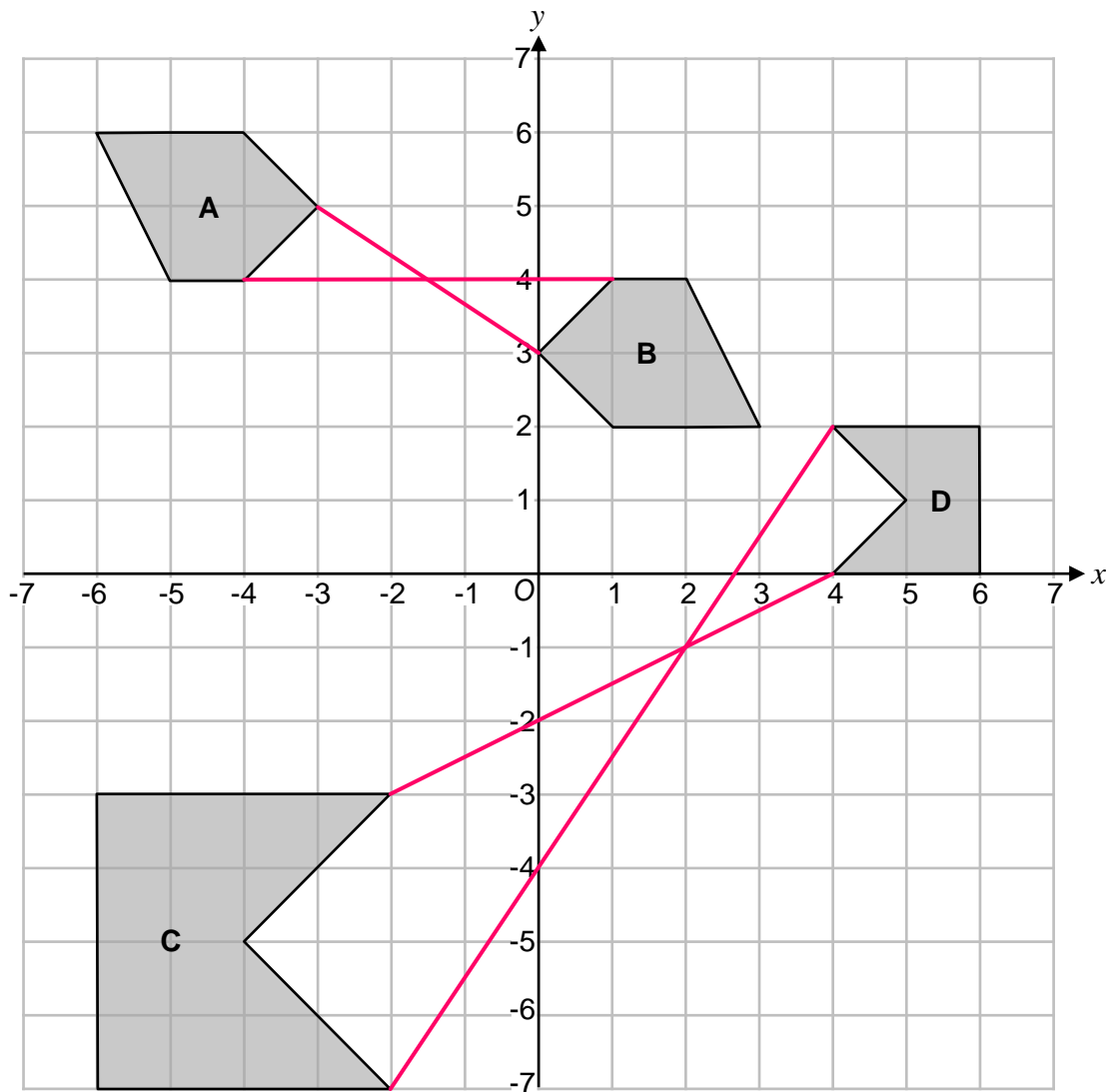
6 (b) Describe fully the single transformation that maps shape **C** onto shape **D**. [3 marks]

Enlargement, scale factor -2
Centre of enlargement $(2, 1)$





7



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

Enlargement, scale factor -1
Centre of enlargement $(-1.5, 4)$

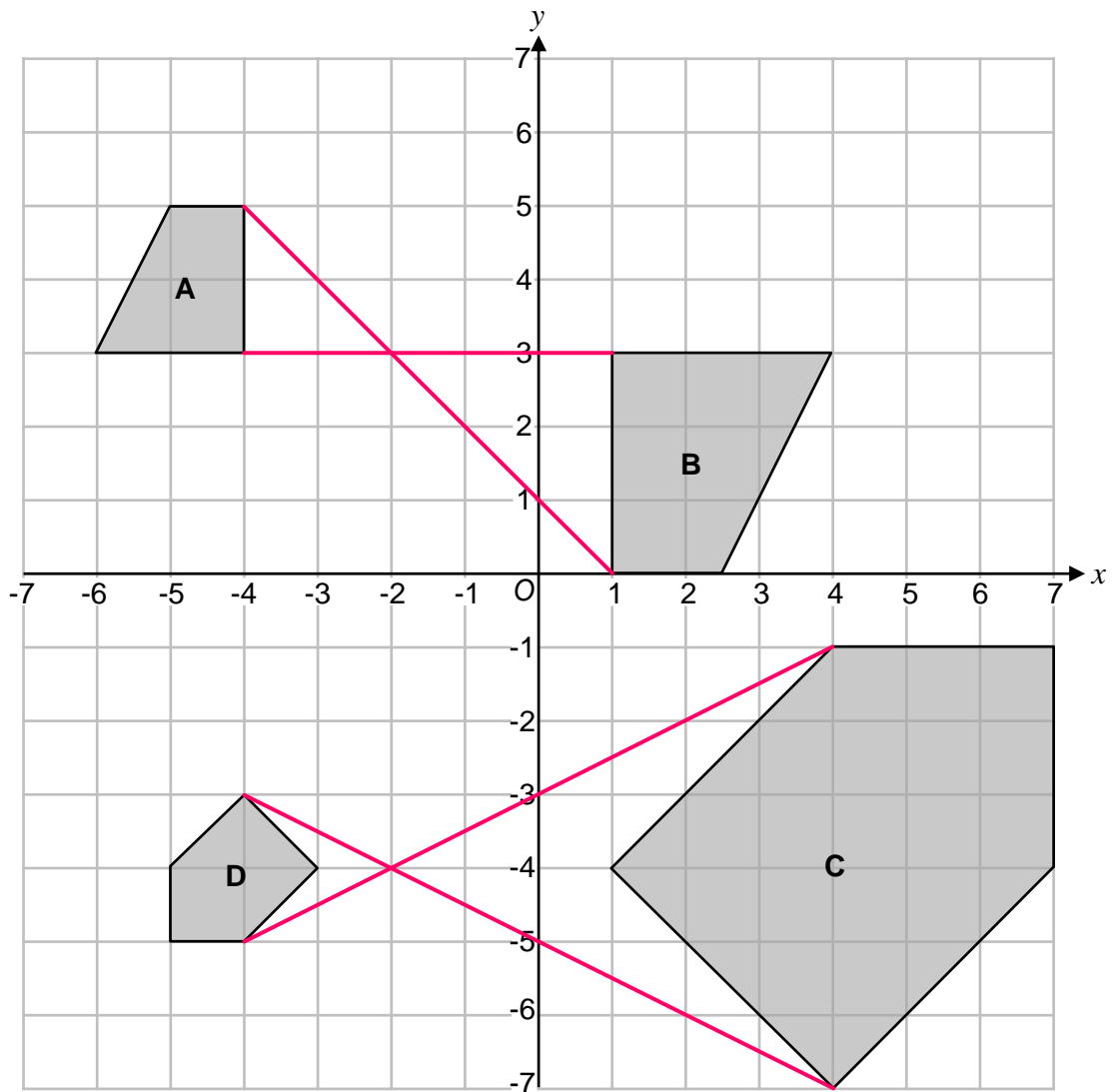
7 (b) Describe fully the single transformation that maps shape **C** onto shape **D**. [3 marks]

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





8



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

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

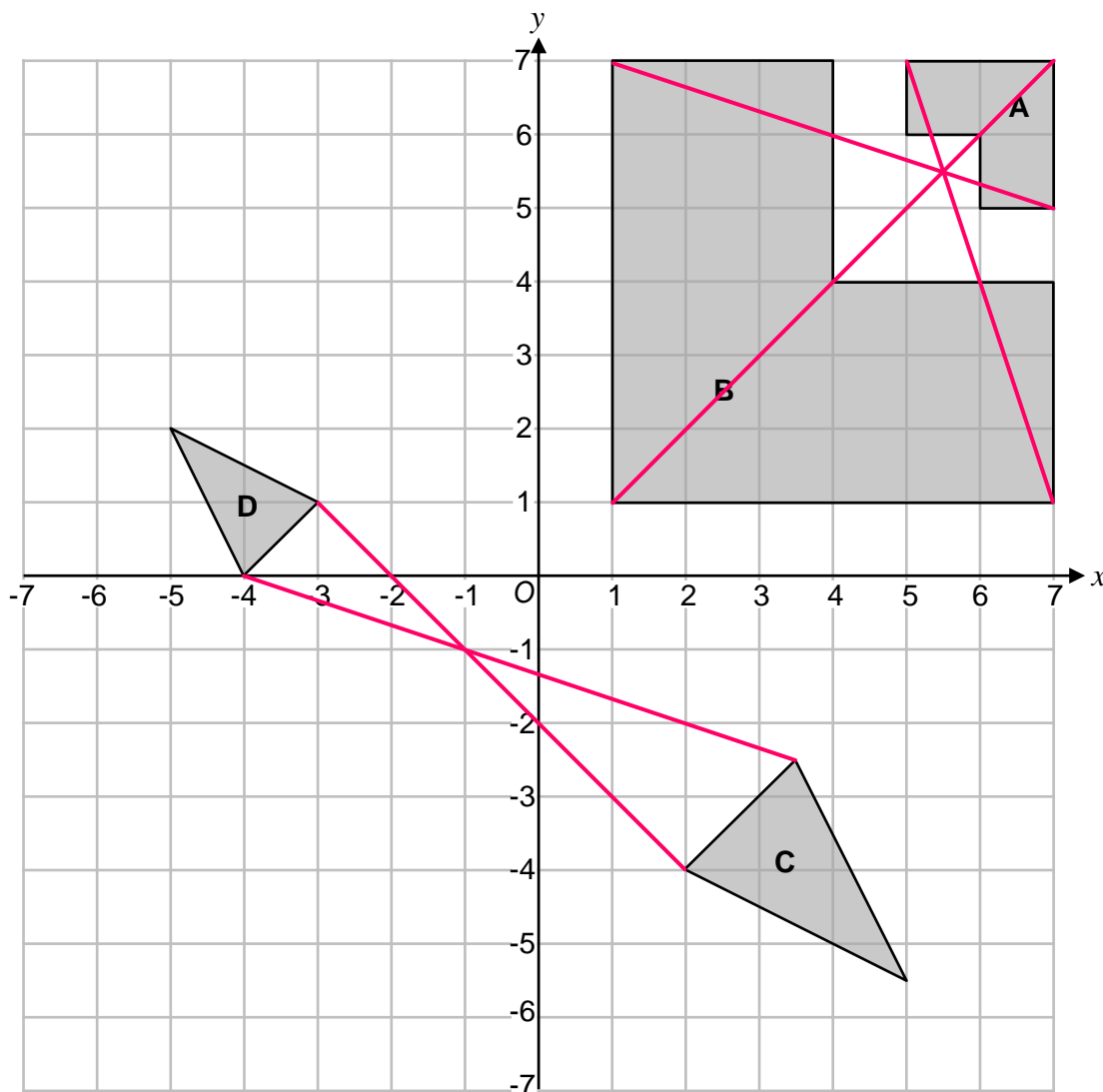
8 (b) Describe fully the single transformation that maps shape **C** onto shape **D**. [3 marks]

Enlargement, scale factor $-\frac{1}{3}$
Centre of enlargement $(-2, -4)$





9



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

Enlargement, scale factor -3
Centre of enlargement $(5, 5)$

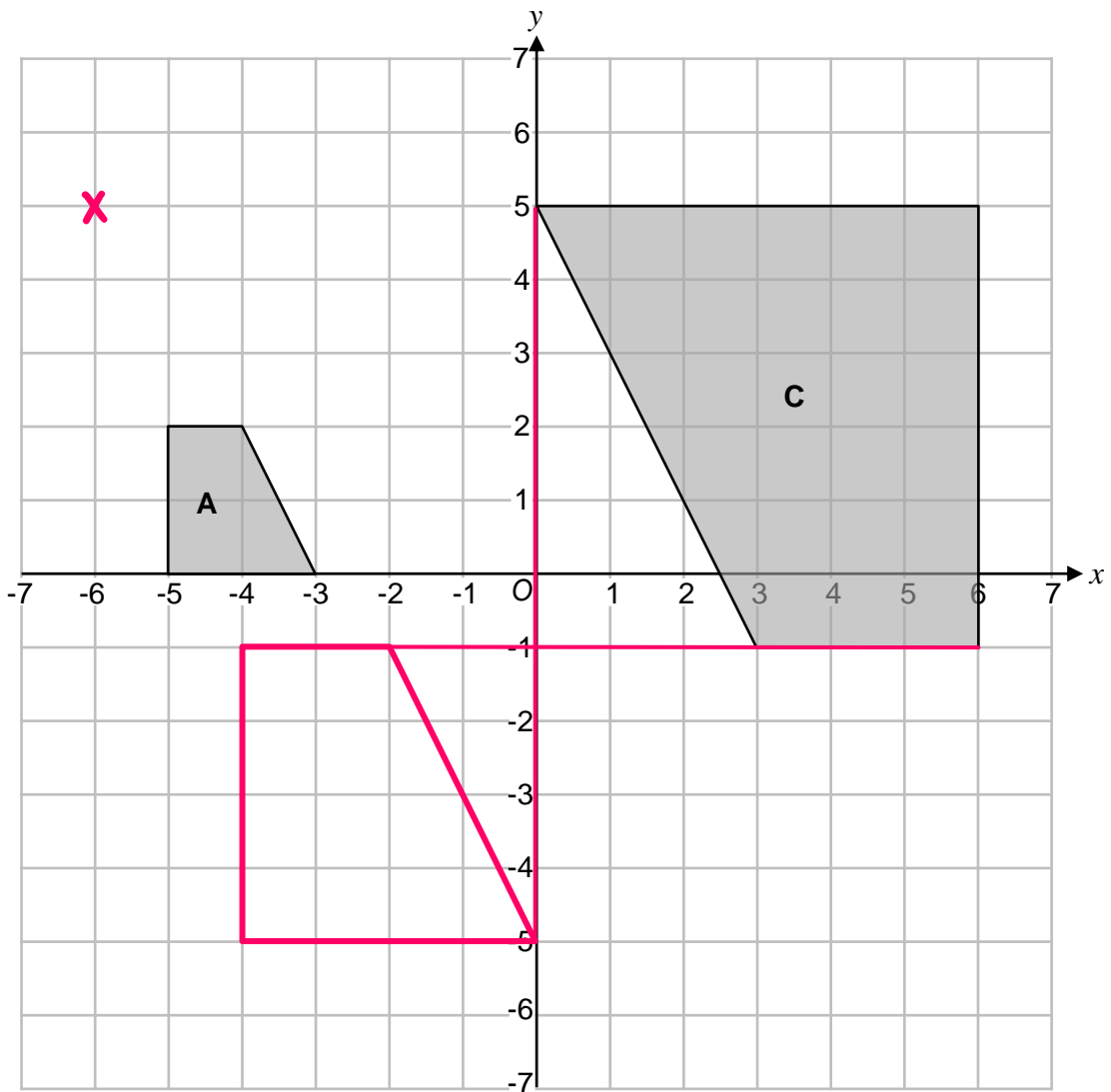
9 (b) Describe fully the single transformation that maps shape C onto shape D. [3 marks]

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





10



Shape **A** is enlarged by scale factor 2 with centre of enlargement $(-6, 5)$ to shape **B**.

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

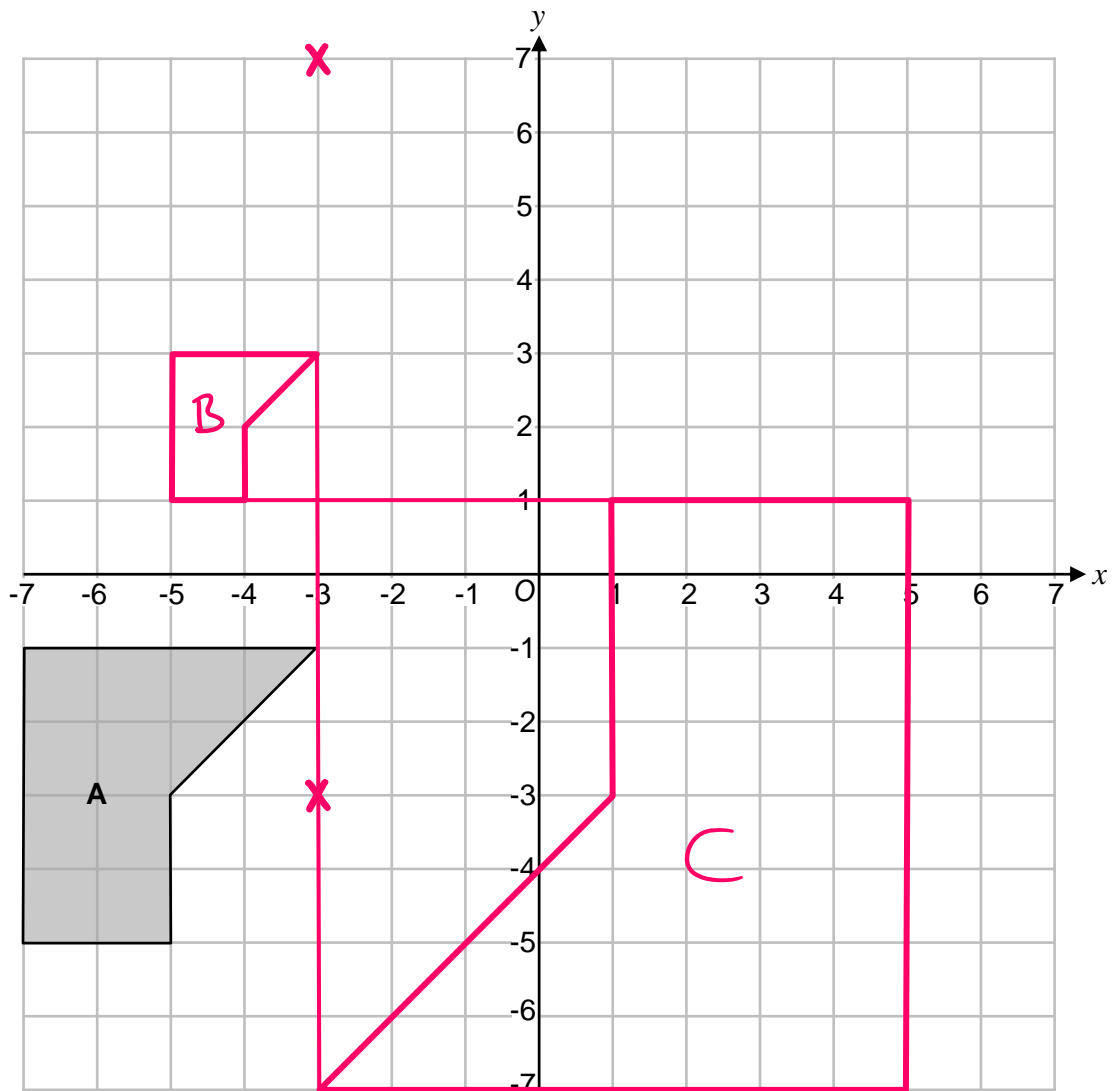
Describe fully the single transformation that maps shape **B** onto shape **C**. [4 marks]

Enlargement, scale factor $-1\frac{1}{2}$
Centre of enlargement $(0, -1)$





11



Shape **A** is enlarged by scale factor 0.5 with centre of enlargement $(-3, 7)$ to shape **B**.

Shape **A** is enlarged by scale factor -2 with centre of enlargement $(-3, -3)$ to shape **C**.

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

Enlargement, scale factor $-\frac{1}{4}$

Centre of enlargement $(-3, 1)$

