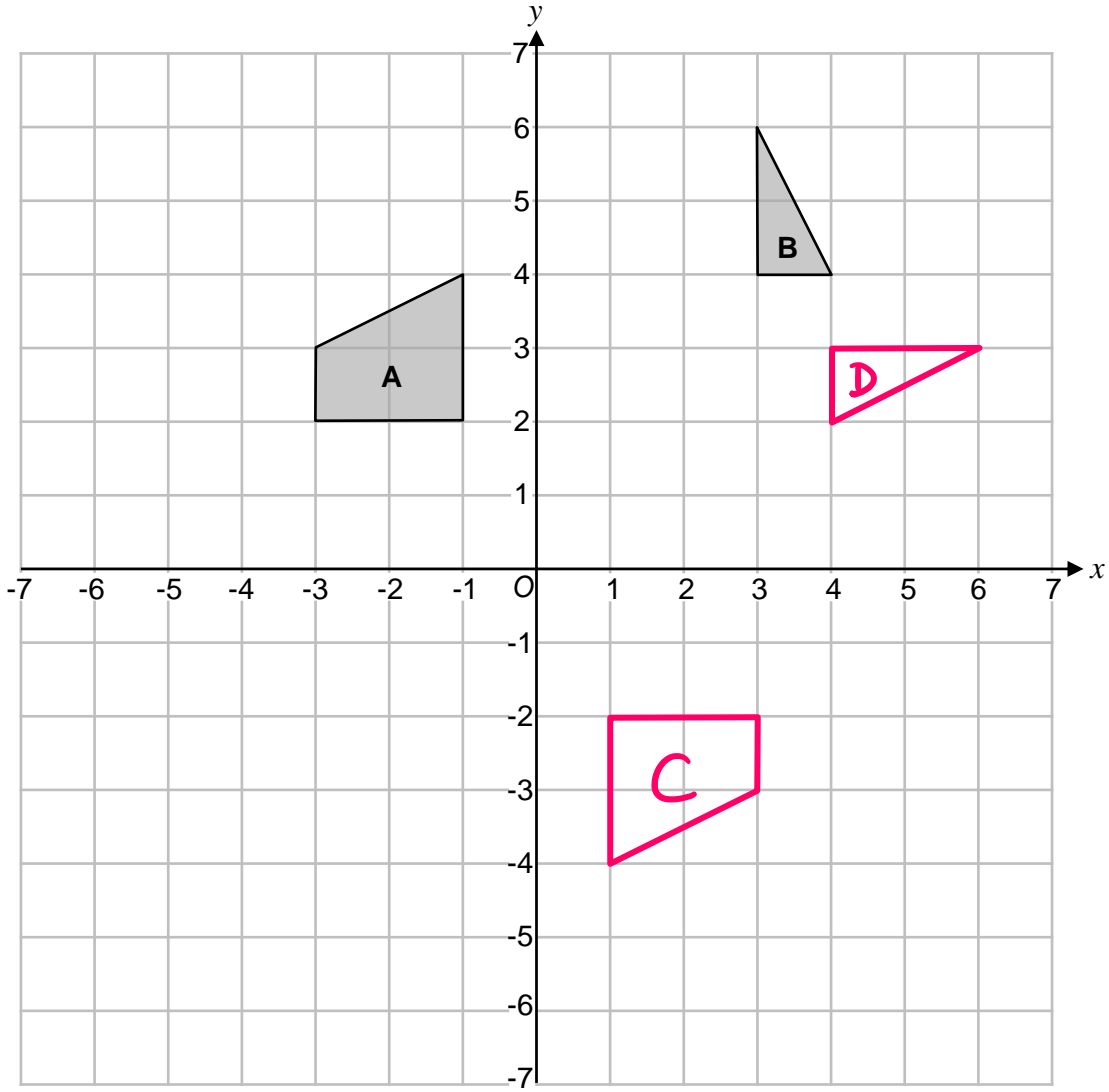




Rotations

← REVISE THIS TOPIC

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



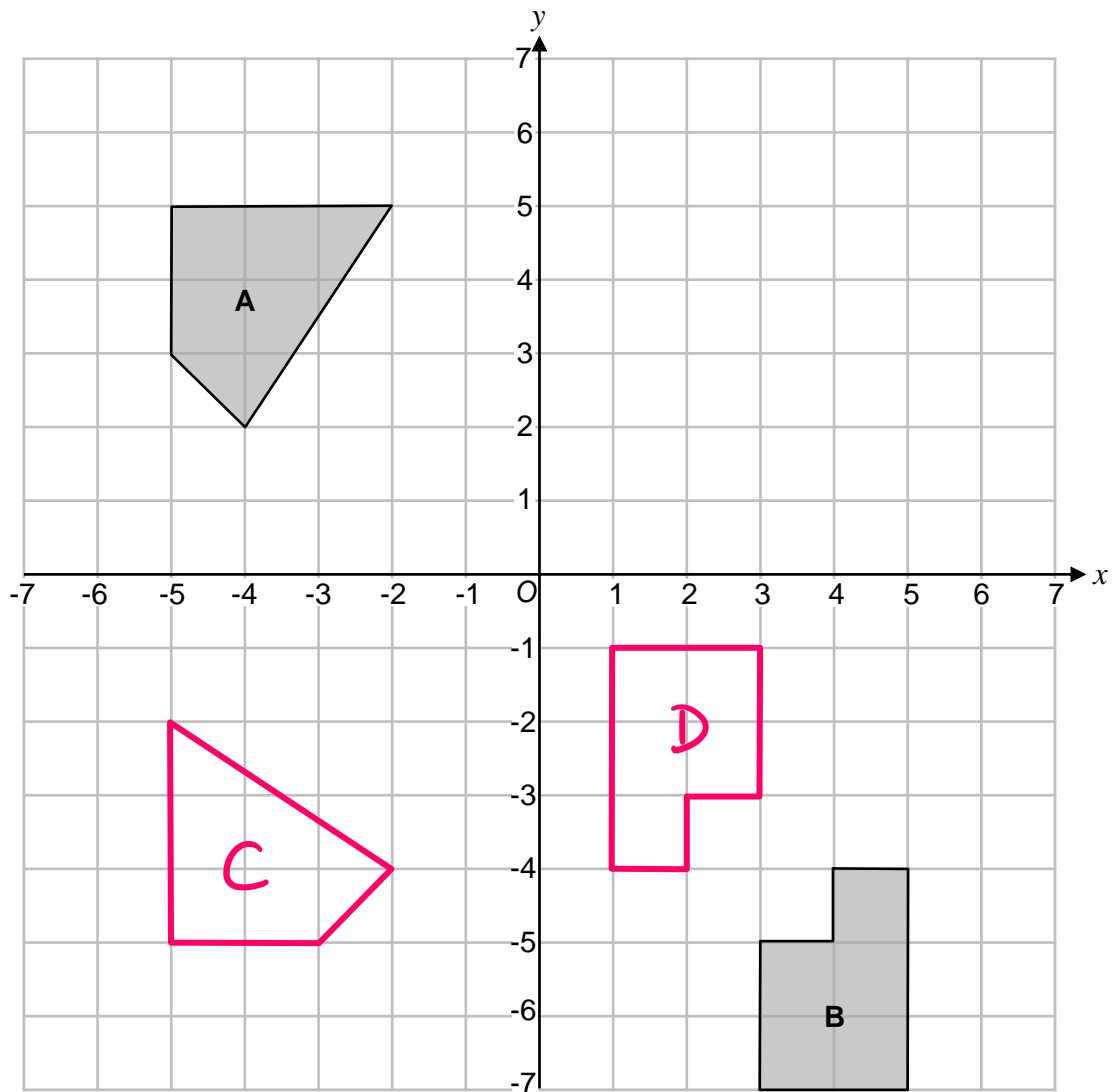
1 (a) Rotate shape **A** 180° about $(0, 0)$ [2 marks]
Label the image shape **C**.

1 (b) Rotate shape **B** 90° clockwise about $(3, 3)$ [2 marks]
Label the image shape **D**.





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



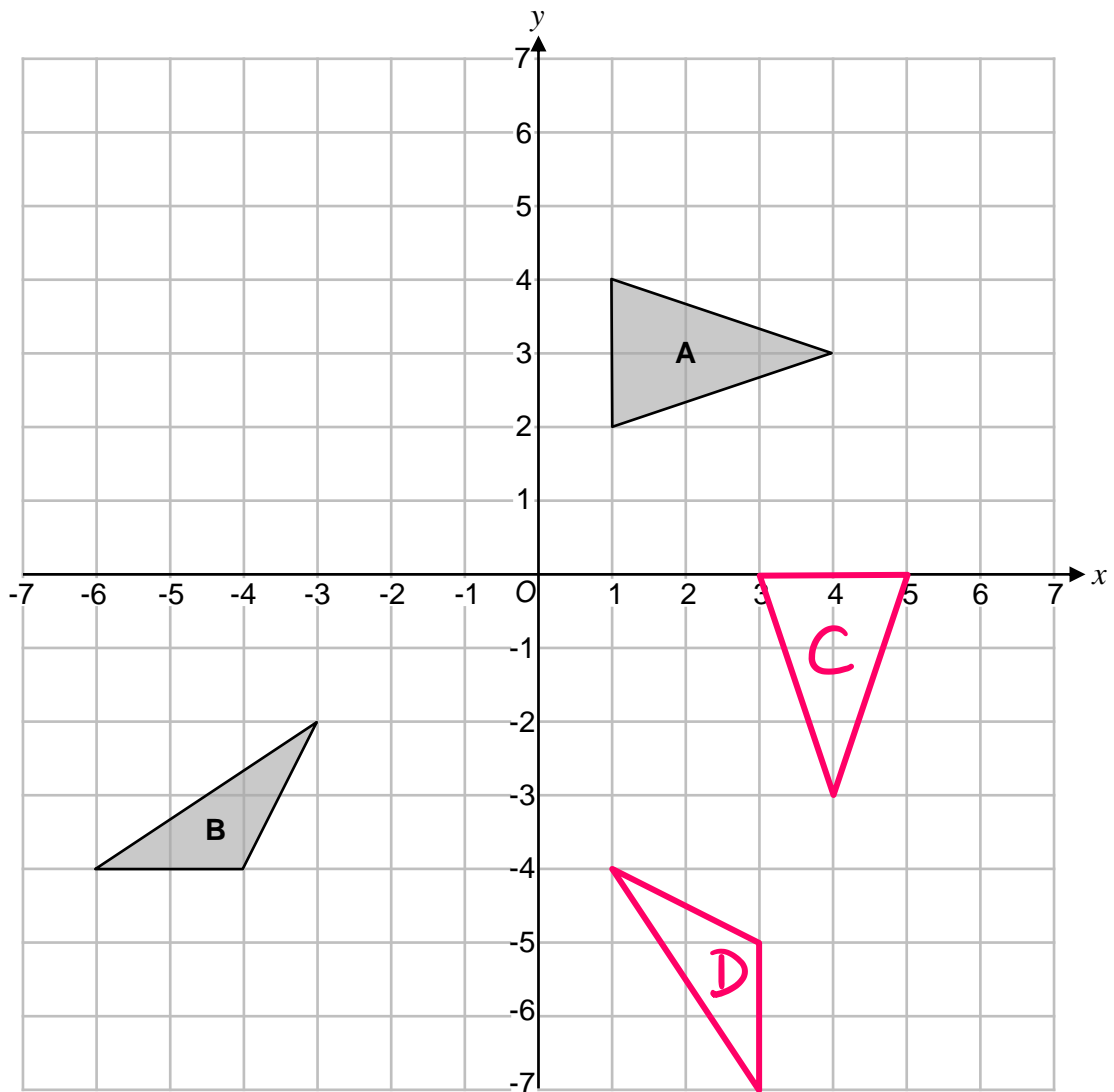
2 (a) Rotate shape **A** 90° anticlockwise about $(0, 0)$ [2 marks]
Label the image shape **C**.

2 (b) Rotate shape **B** 180° about $(3, -4)$ [2 marks]
Label the image shape **D**.





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



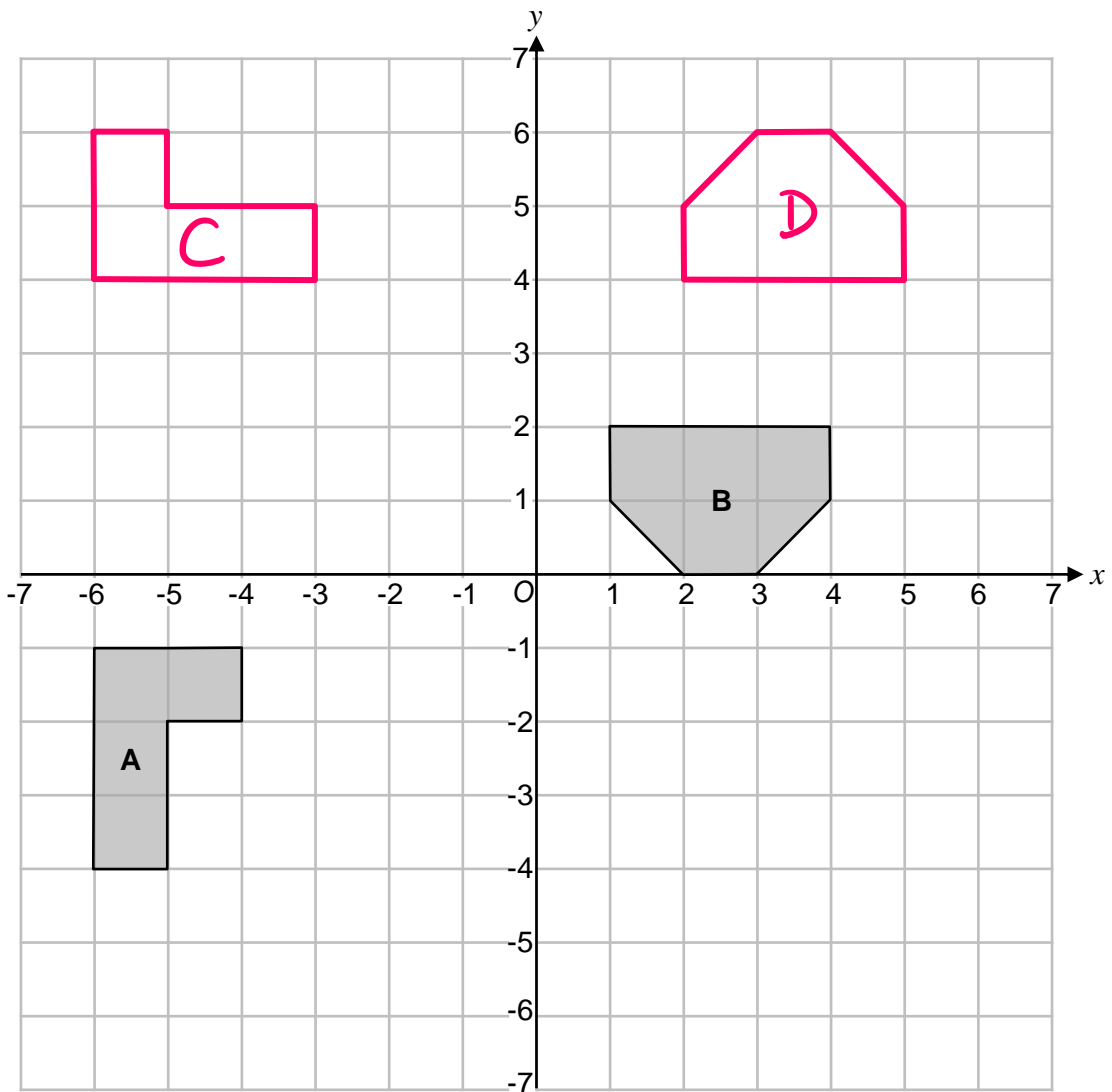
3 (a) Rotate shape **A** 90° clockwise about $(1, 0)$ [2 marks]
Label the image shape **C**.

3 (b) Rotate shape **B** 90° anticlockwise about $(0, -1)$ [2 marks]
Label the image shape **D**.





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

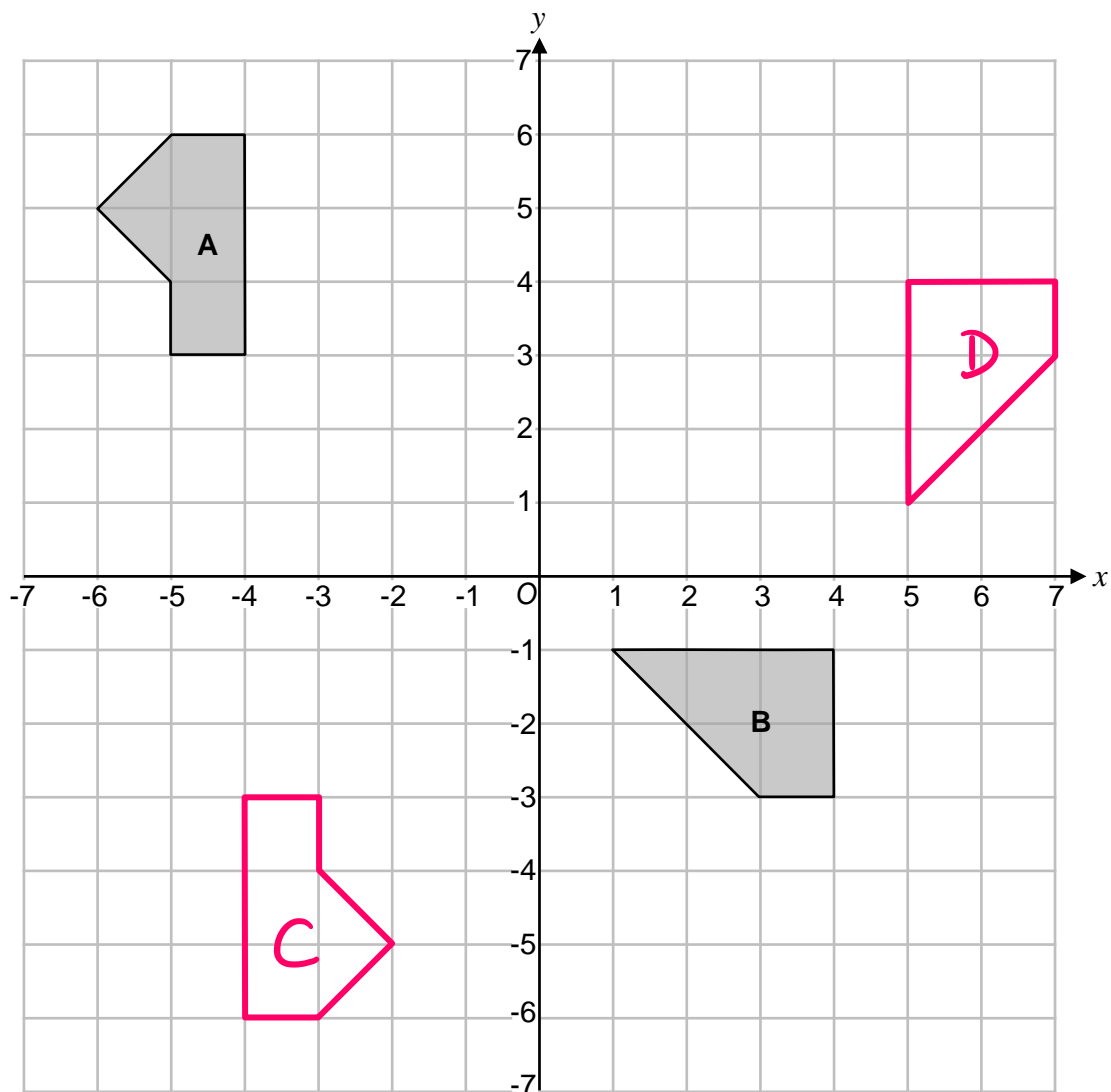


4 (a) Rotate shape **A** 90° clockwise about $(-1, 1)$ [2 marks]
Label the image shape **C**.

4 (b) Rotate shape **B** 180° about $(3, 3)$ [2 marks]
Label the image shape **D**.



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



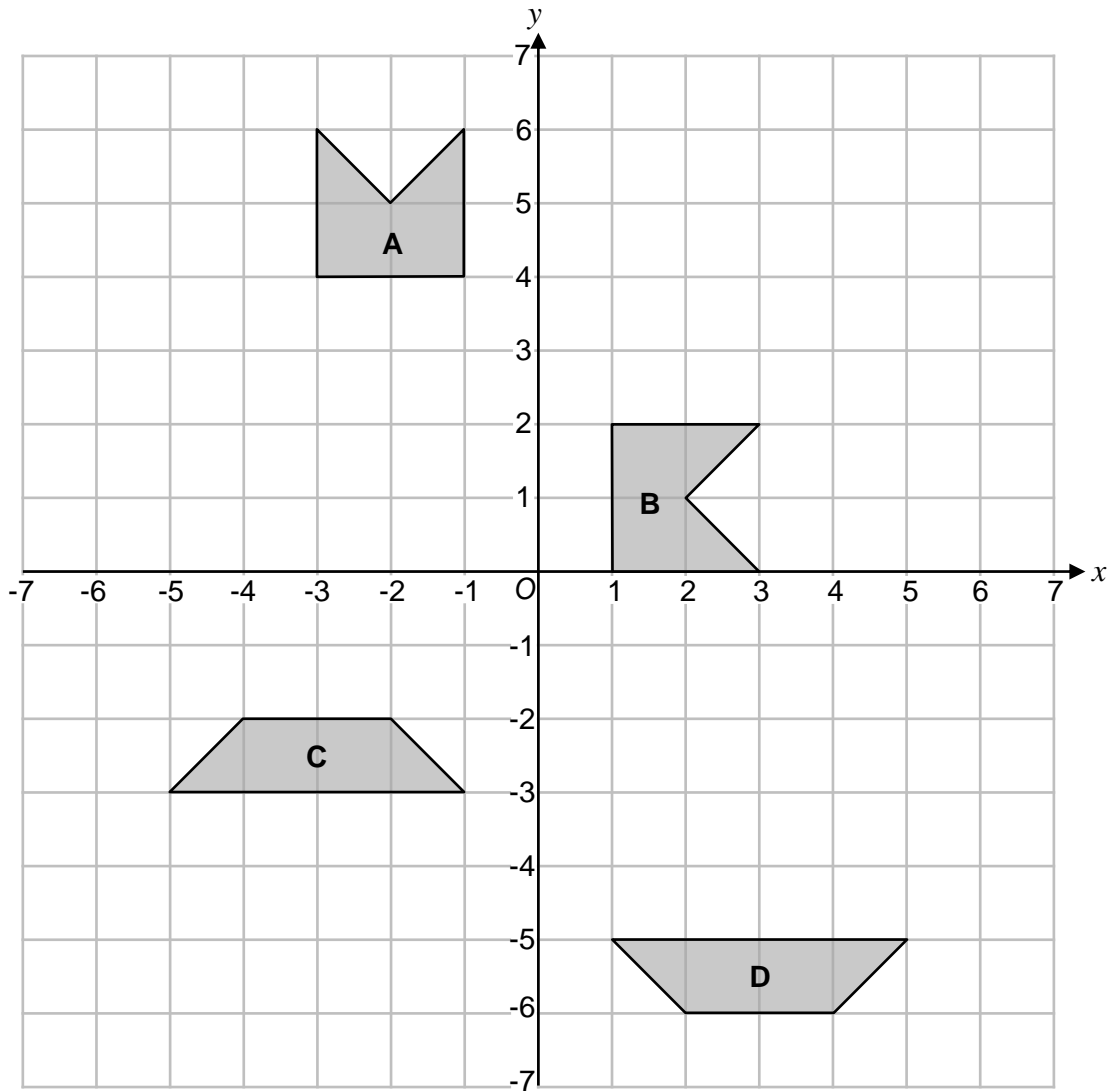
5 (a) Rotate shape **A** 180° about $(-4, 0)$ [2 marks]
Label the image shape **C**.

5 (b) Rotate shape **B** 90° anticlockwise about $(2, 2)$ [2 marks]
Label the image shape **D**.





6



6 (a) Describe fully the single transformation that maps shape A onto shape B. [2 marks]

Rotation 90° clockwise about $(-2, 1)$

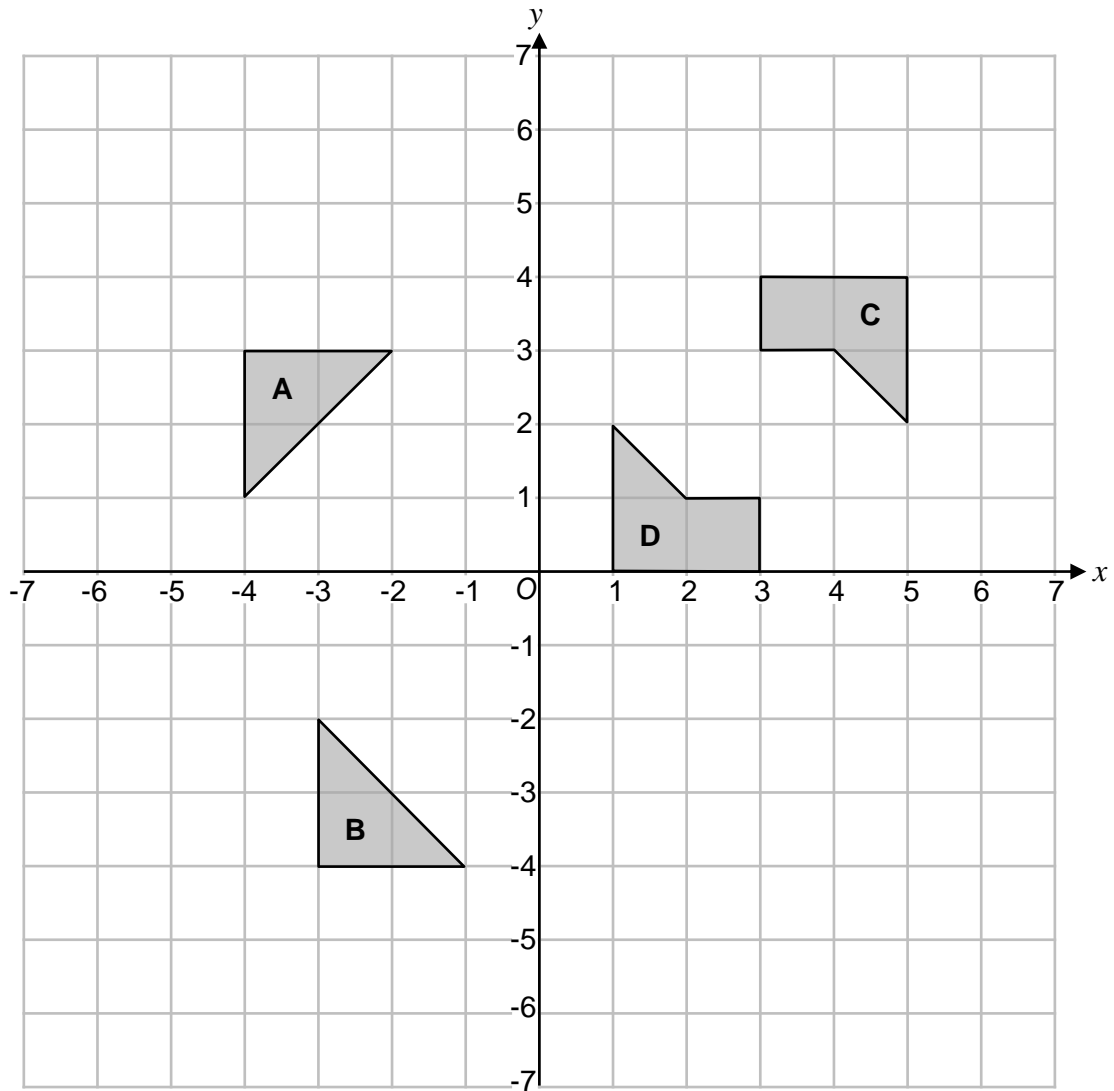
6 (b) Describe fully the single transformation that maps shape C onto shape D. [2 marks]

Rotation 180° about $(0, -4)$





7



7 (a) Describe fully the single transformation that maps shape A onto shape B. [2 marks]

Rotation 90° anticlockwise about $(0,0)$

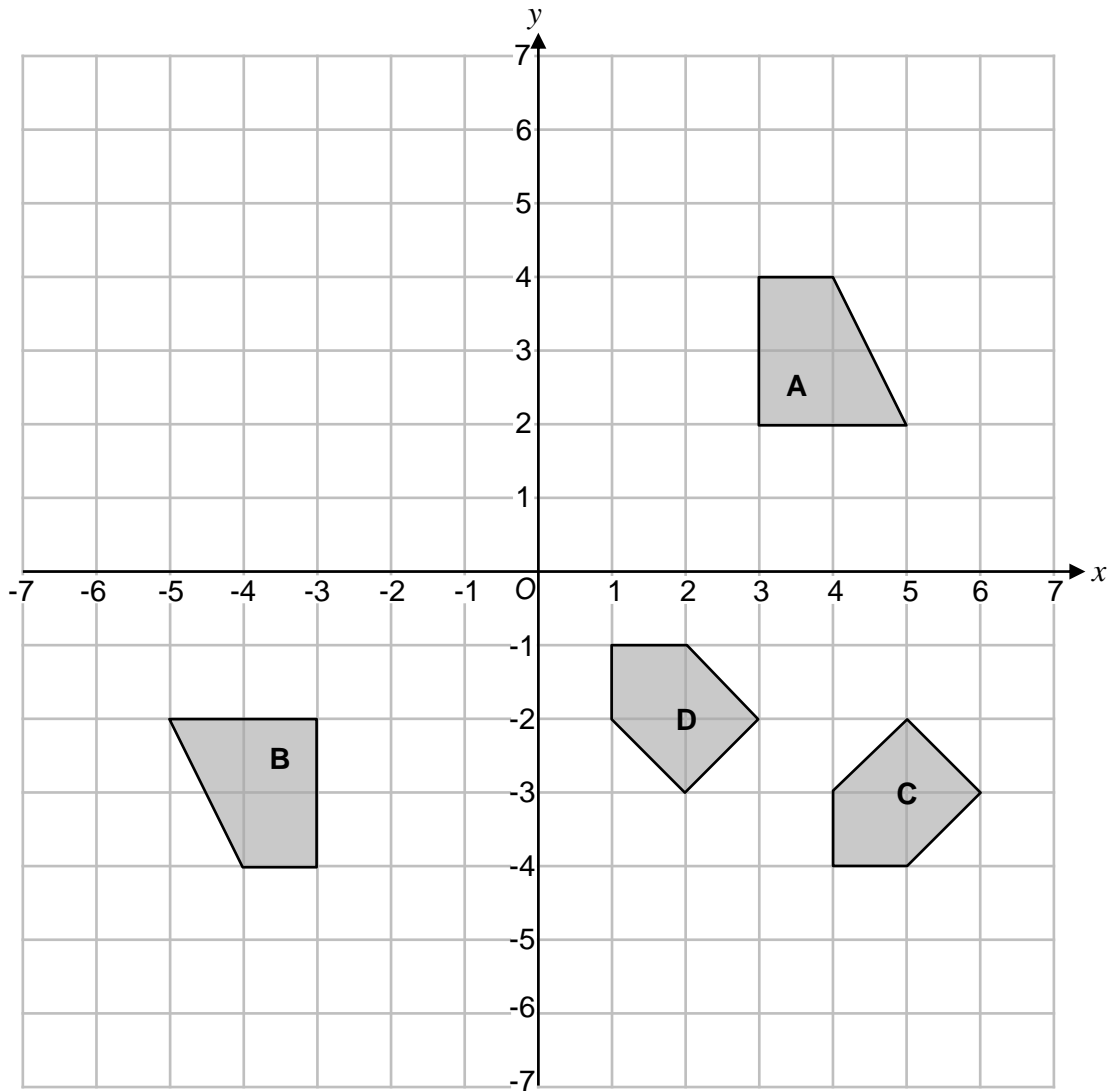
7 (b) Describe fully the single transformation that maps shape C onto shape D. [2 marks]

Rotation 180° about $(3,2)$





8



8 (a) Describe fully the single transformation that maps shape A onto shape B. [2 marks]

Rotation 180° about $(0,0)$

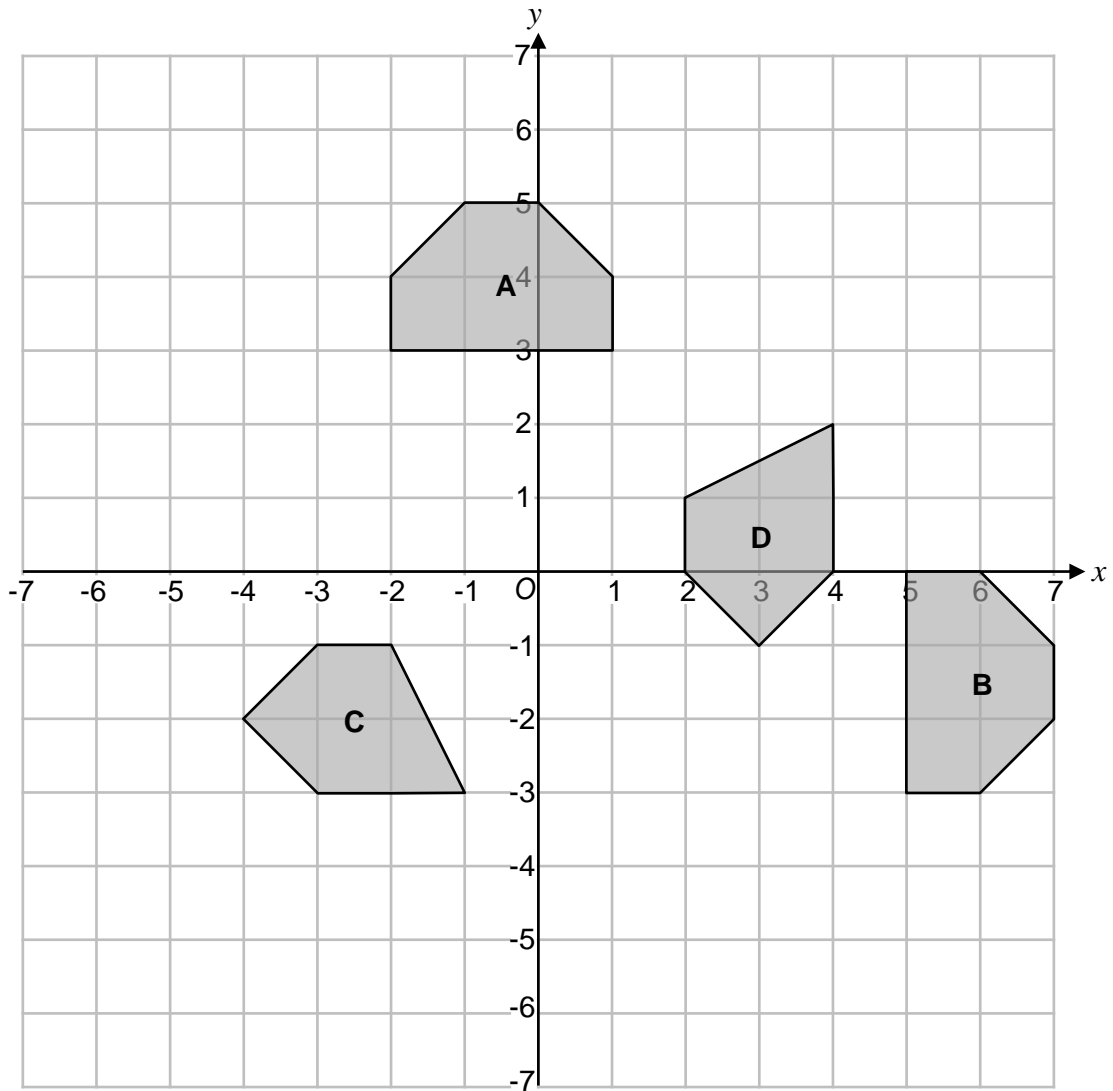
8 (b) Describe fully the single transformation that maps shape C onto shape D. [2 marks]

Rotation 90° clockwise about $(4,-1)$





9



9 (a) Describe fully the single transformation that maps shape **A** onto shape **B**. [2 marks]

Rotation 90° clockwise about $(0, -2)$

9 (b) Describe fully the single transformation that maps shape **C** onto shape **D**. [2 marks]

Rotation 90° anticlockwise about $(-1, 2)$

