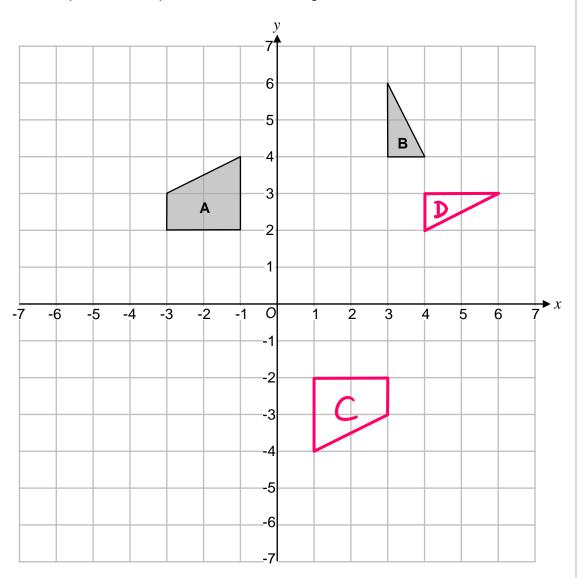


## Rotations



## REVISE THIS TOPIC

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



**1 (a)** Rotate shape **A** 180° about (0, 0) Label the image shape **C**.

[2 marks]

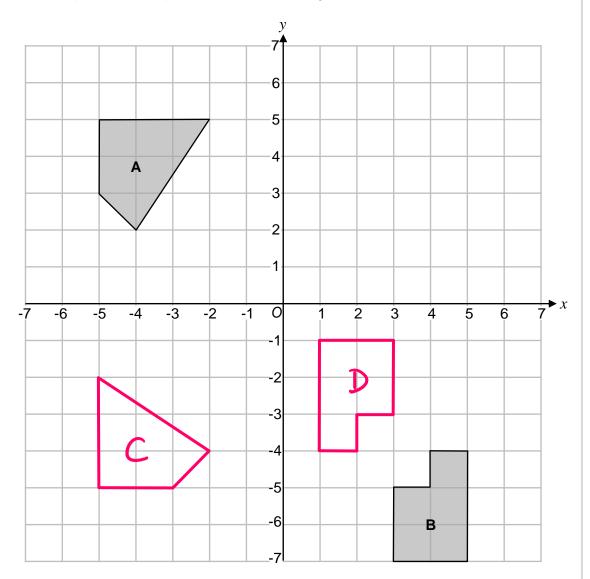
**1 (b)** Rotate shape **B** 90° clockwise about (3, 3) Label the image shape **D**.

[2 marks]





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



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

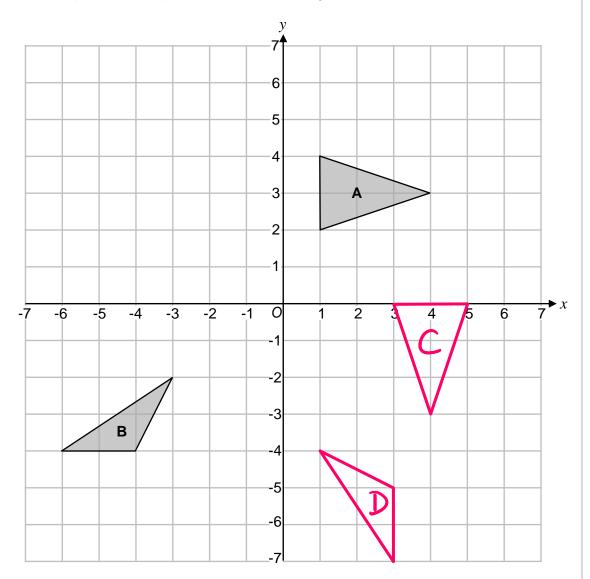
[2 marks]

**2 (b)** Rotate shape **B** 180° about (3, –4) Label the image shape **D**.

[2 marks]



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



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

[2 marks]

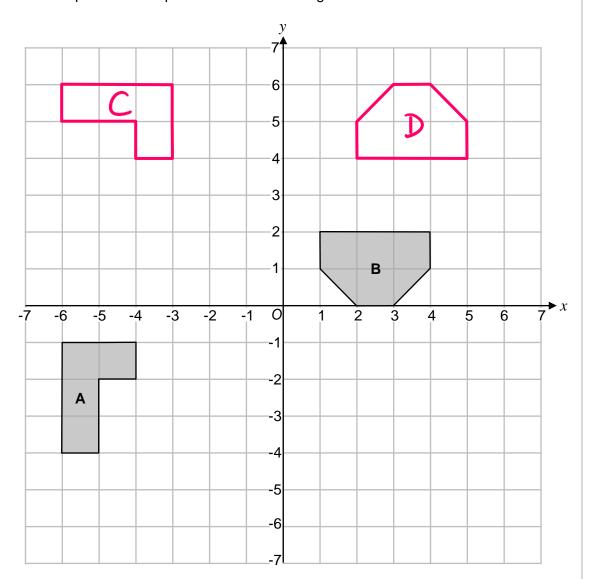
**3 (b)** Rotate shape **B** 90° anticlockwise about (0, -1) Label the image shape **D**.

[2 marks]



8

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



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

[2 marks]

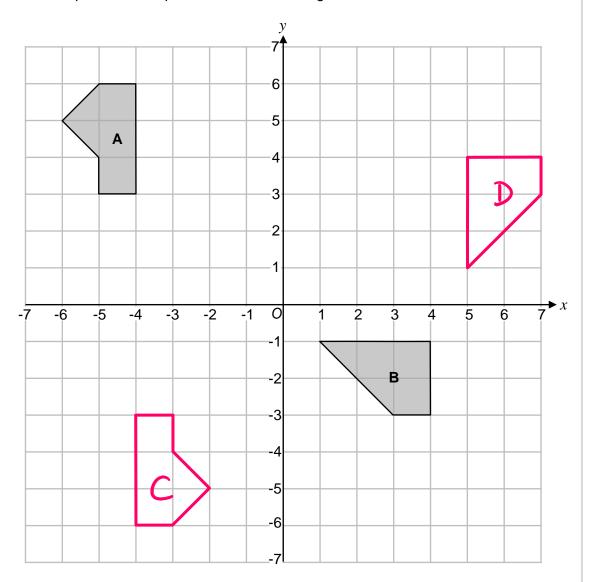
**4 (b)** Rotate shape **B** 180° about (3, 3) Label the image shape **D**.

[2 marks]



5

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



**5 (a)** Rotate shape **A** 180° about (–4, 0) Label the image shape **C**.

[2 marks]

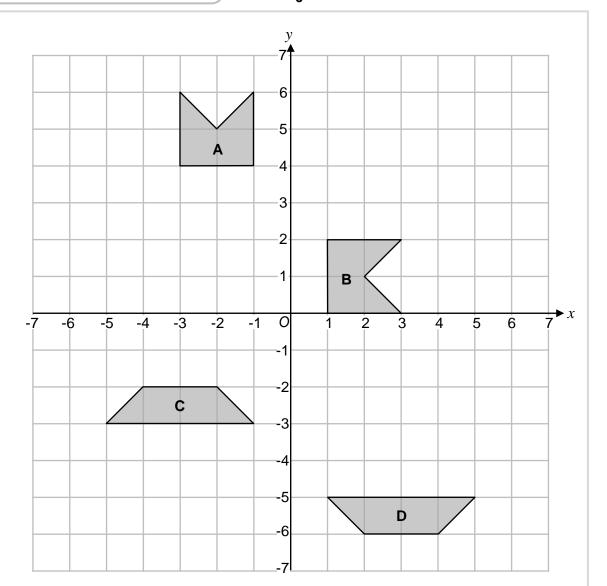
**5 (b)** Rotate shape **B** 90° anticlockwise about (2, 2) Label the image shape **D**.

[2 marks]



8





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

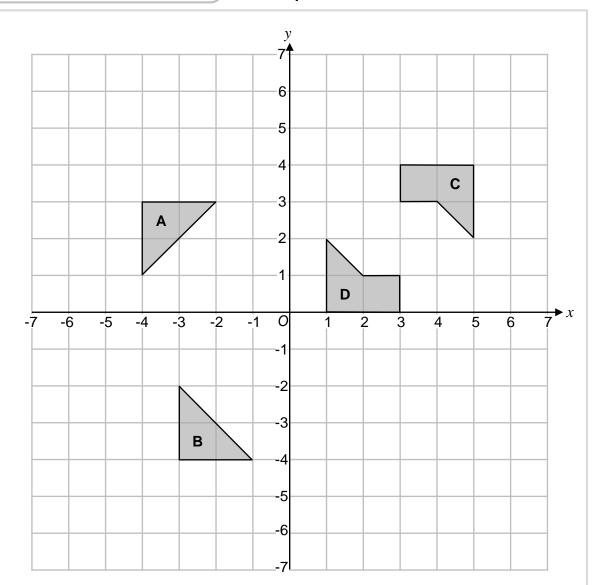
Rotation 90° clockwise about (-2,1)

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

Rotation 180° about (0,-4)







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

Rotation 90° anticlockwise about (0,0)

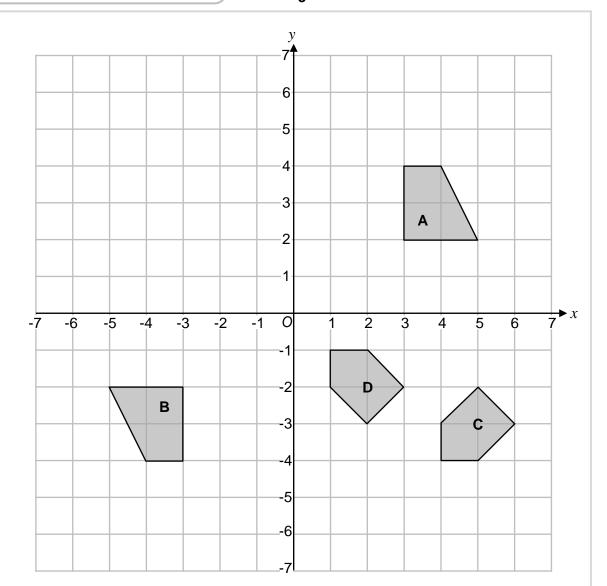
7 (b) Describe fully the single transformation that maps shape C onto shape D. [2 marks]

Rotation 180° about (3,2)



Turn over ▶





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

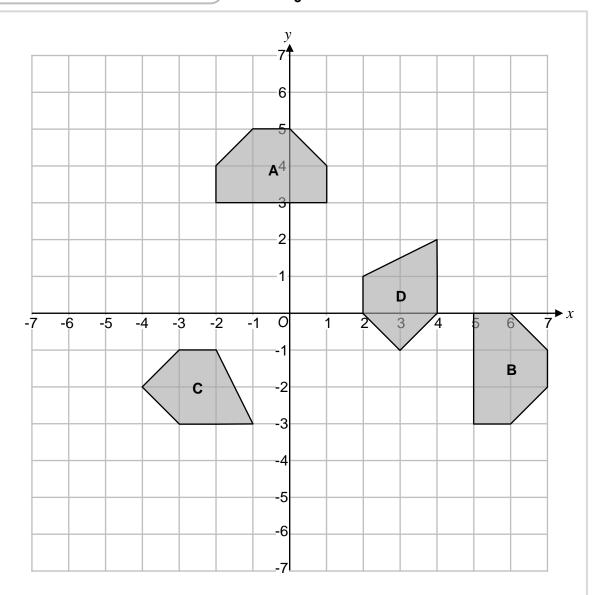
Rotation 180° about (0,0)

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)

