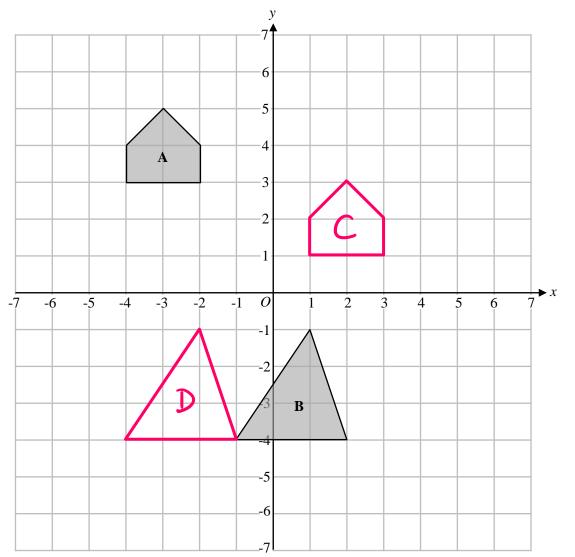


## **Translations**



## **REVISE THIS TOPIC**

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



- (a) Translate shape **A** by the vector  $\begin{bmatrix} 5 \\ -2 \end{bmatrix}$ Label the image shape C.
- (b) Translate shape **B** by the vector  $\begin{pmatrix} -3 \\ 0 \end{pmatrix}$  Label the image shape **D**.

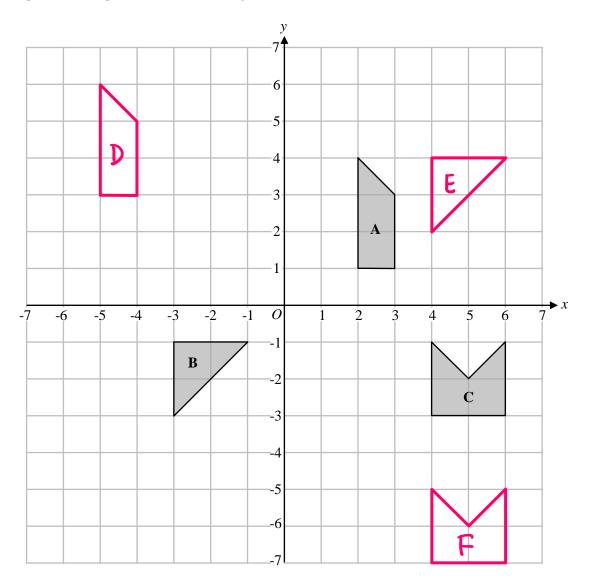
(2)

(2)

(Total for Question 1 is 4 marks)







- (a) Translate shape **A** by the vector  $\begin{pmatrix} -7 \\ 2 \end{pmatrix}$  Label the image shape **D**.
- (b) Translate shape **B** by the vector  $\begin{pmatrix} 7 \\ 5 \end{pmatrix}$
- (c) Translate shape  $\mathbf{C}$  by the vector  $\begin{pmatrix} 0 \\ -4 \end{pmatrix}$

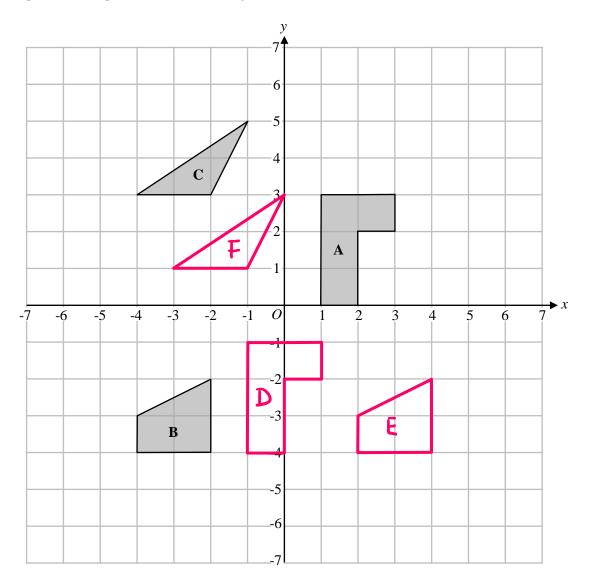
(2)

(2)

(2)

(Total for Question 2 is 6 marks)





- (a) Translate shape **A** by the vector  $\begin{pmatrix} -2 \\ -4 \end{pmatrix}$  Label the image shape **D**.
- (b) Translate shape **B** by the vector  $\begin{bmatrix} 6 \\ 0 \end{bmatrix}$  Label the image shape **E**.
- (c) Translate shape **C** by the vector  $\begin{pmatrix} 1 \\ -2 \end{pmatrix}$

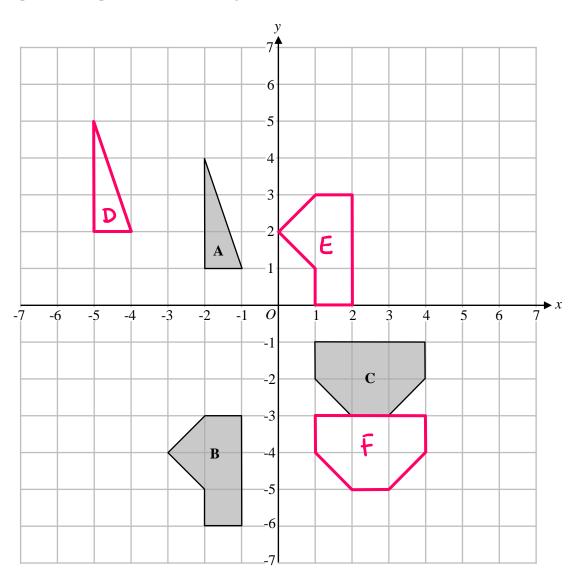
(2)

(2)

(2)

(Total for Question 3 is 6 marks)





- (a) Translate shape **A** by the vector  $\begin{pmatrix} -3 \\ 1 \end{pmatrix}$  Label the image shape **D**.
- (b) Translate shape **B** by the vector  $\begin{pmatrix} 3 \\ 6 \end{pmatrix}$  Label the image shape **E**.
- (c) Translate shape  $\mathbf{C}$  by the vector  $\begin{pmatrix} 0 \\ -2 \end{pmatrix}$

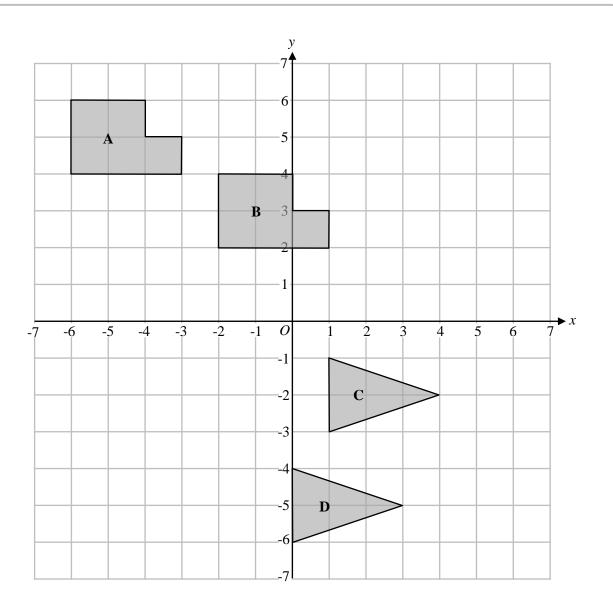
(2)

(2)

(2)

(Total for Question 4 is 6 marks)





(a) Describe fully the single transformation that maps shape  $\boldsymbol{A}$  onto shape  $\boldsymbol{B}.$ 

Translation by the vector  $\begin{pmatrix} 4 \\ -2 \end{pmatrix}$ 

(2)

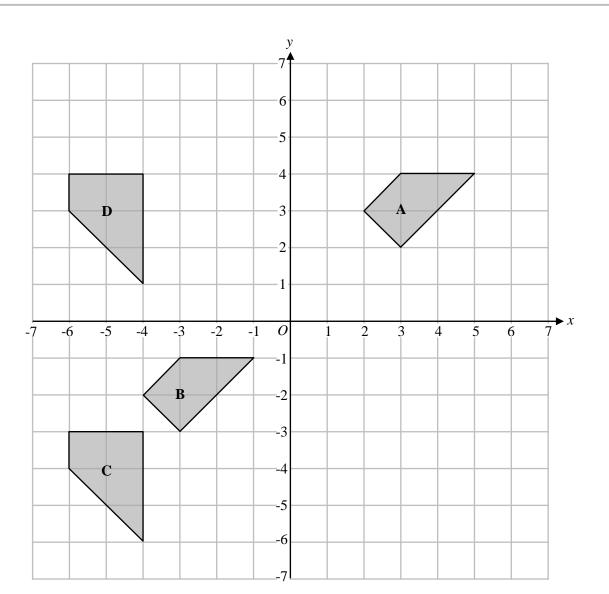
(b) Describe fully the single transformation that maps shape  $\boldsymbol{C}$  onto shape  $\boldsymbol{D}.$ 

Translation by the vector  $\begin{pmatrix} -1 \\ -3 \end{pmatrix}$ 

(2)



(Total for Question 5 is 4 marks)



(a) Describe fully the single transformation that maps shape  $\bf A$  onto shape  $\bf B$ .

Translation by the vector (-6)

(2)

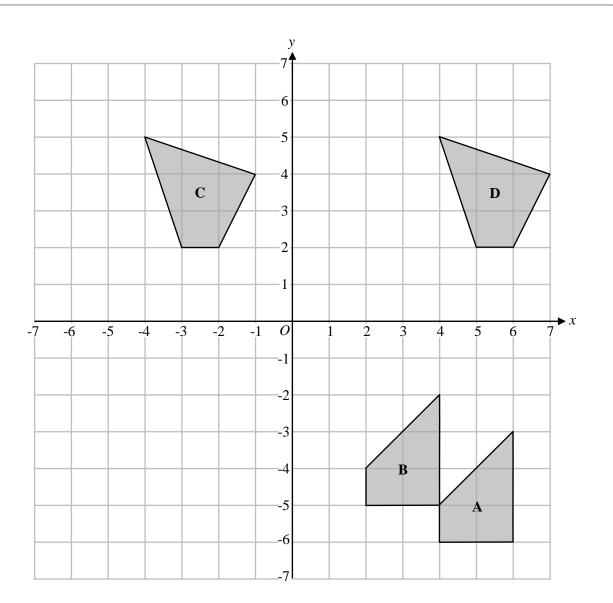
(b) Describe fully the single transformation that maps shape  ${\bf C}$  onto shape  ${\bf D}$ .

Translation by the vector  $\begin{pmatrix} 0 \\ 7 \end{pmatrix}$ 

(2)



(Total for Question 6 is 4 marks)



(a) Describe fully the single transformation that maps shape A onto shape B.

Translation by the vector  $\begin{pmatrix} -2 \\ 1 \end{pmatrix}$ 

(2)

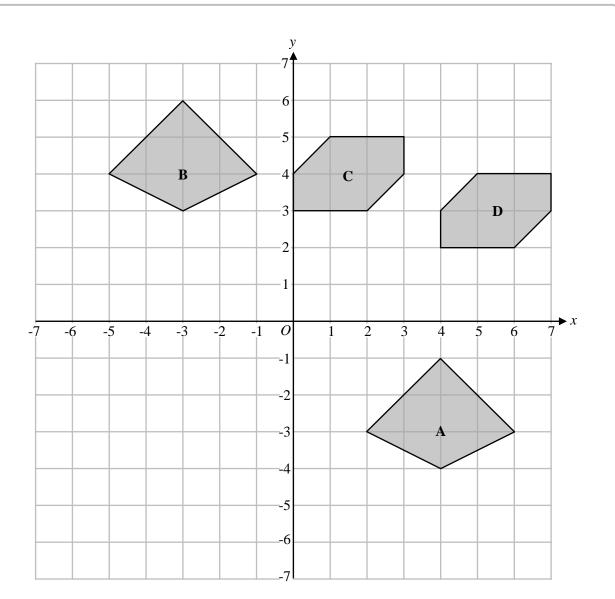
(b) Describe fully the single transformation that maps shape  ${\bf C}$  onto shape  ${\bf D}$ .

Translation by the vector (8)

(2)



(Total for Question 7 is 4 marks)



(a) Describe fully the single transformation that maps shape  $\boldsymbol{A}$  onto shape  $\boldsymbol{B}.$ 

Translation by the vector  $\begin{pmatrix} -7 \\ 7 \end{pmatrix}$ 

(2)

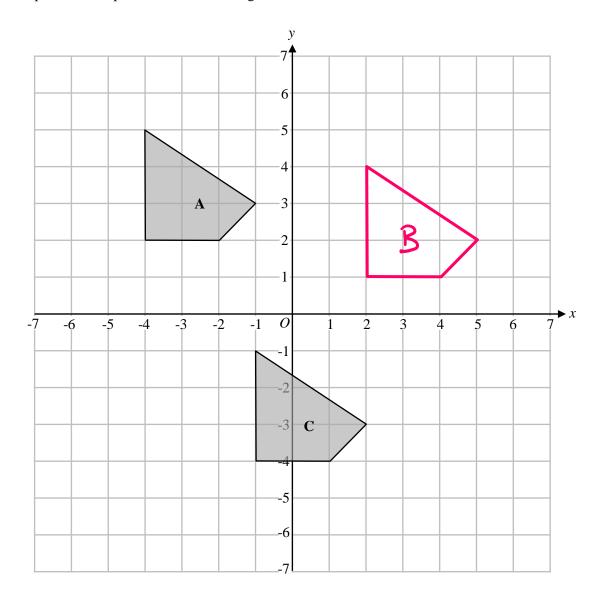
(b) Describe fully the single transformation that maps shape  ${\bf C}$  onto shape  ${\bf D}$ .

Translation by the vector  $\begin{pmatrix} 4 \\ -1 \end{pmatrix}$ 

(2)



(Total for Question 8 is 4 marks)



Shape **A** is translated to shape **B** by the vector  $\begin{pmatrix} 6 \\ -1 \end{pmatrix}$ 

Describe fully the single transformation that maps shape  ${\bf B}$  onto shape  ${\bf C}.$ 

Translation by the vector (-3)



(Total for Question 9 is 3 marks)