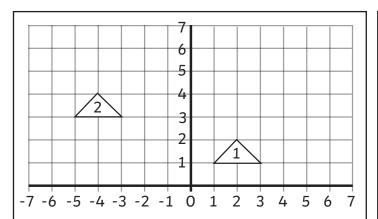
## **2D Shape Translations**

I can describe the translation of a 2D shape on a two-quadrant co-ordinate grid.

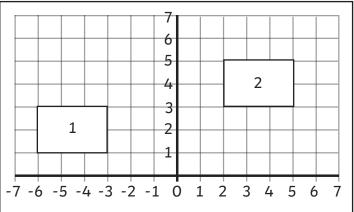
Describe the positions and translations of the 2D shapes.



Starting co-ordinates:

Translation:

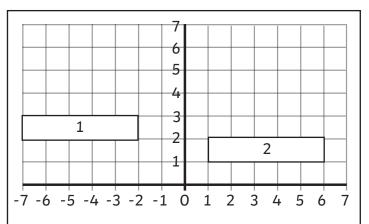
Finishing co-ordinates:



Starting co-ordinates:

Translation:

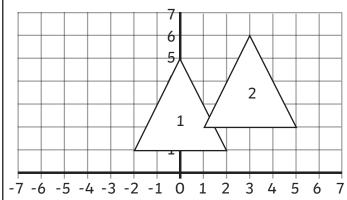
Finishing co-ordinates:



Starting co-ordinates:

Translation:

Finishing co-ordinates:



Starting co-ordinates:

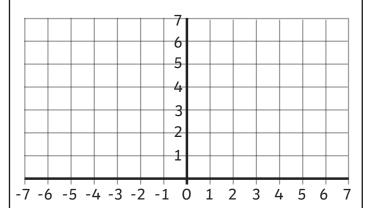
Translation:

Finishing co-ordinates:

## **2D Shape Translations**

Plot the following co-ordinates and following the translations to reveal a new shape.

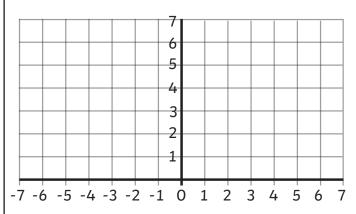
Plot these co-ordinates to reveal a shape: (0,1), (2,1), (2,3), (0,3)



Translate the shape left 6, down 1.

What are the co-ordinates of the new shape?

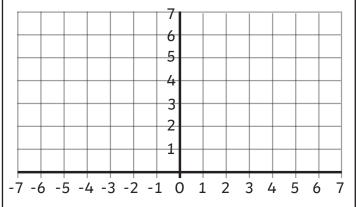
Plot these co-ordinates to reveal a shape: (-2, 3), (-1, 5), (-3, 5)



Translate the shape right 4, down 2.

What are co-ordinates of the new shape?

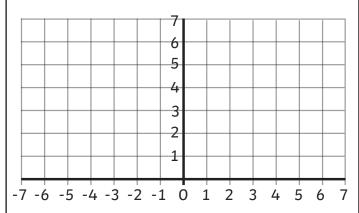
Plot these co-ordinates to reveal a shape: (1,1), (3,1), (1,3)



Translate the shape left 2, up 2.

What are the co-ordinates of the new shape?

Plot these co-ordinates to reveal a shape: (3, 3), (4,4), (3,5), (2, 4)



Translate the shape left 3, down 3.

What are the co-ordinates of the new shape?

## 2D Shape Translations Answers

Describe the positions and translations of the 2D shapes.

Starting co-ordinates: (1,1), (3,1), (2,2)

Translation: Left 6, up 2

Finishing co-ordinates: (-5,3), (-3,3), (-4, 4)

Starting co-ordinates:

(-6,1), (-3,1), (-3,3), (-6,3)

Translation: Right 8, up 2

Finishing co-ordinates: **(2,3)**, **(5,3)**, **(5,5)**, **(2,5)** 

Starting co-ordinates:

(-7, 2), (-2,2), (-2, 3), (-7,3)

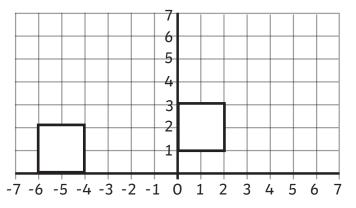
Translation: Right 8, down 1

Finishing co-ordinates: **(1,1)**, **(6,1)**, **(6,2)**, **(1,2)** 

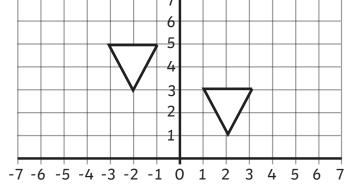
Starting co-ordinates: (-2,1), (2,1), (0,5)

Translation: Right 3, up 1

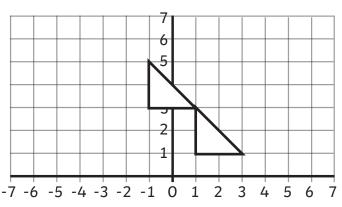
Finishing co-ordinates: (1,2), (5,2), (3,6)



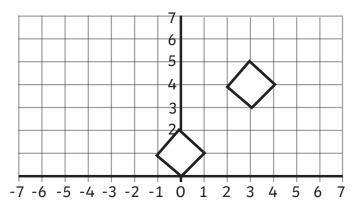
What are the co-ordinates of the new shape? (-6, 0), (-4, 0), (-4,2), (-6, 2)



What are the co-ordinates of the new shape? (2,1), (3,3), (1,3)



What are the co-ordinates of the new shape? (-1, 3), (1,3), (-1,5)



What are the co-ordinates of the new shape? **(0,0)**, **(1,1)**, **(0,2)**, **(-1, 1)** 



## 2D Shape Translations Answers

Describe the positions and translations of the 2D shapes.

Starting co-ordinates:

(1,1), (4,1), (4,3), (1,3)

Translation: Left 5, down 4

Finishing co-ordinates:

(-4,-3), (-1, -3), (-1, -1), (-4, -1)

Starting co-ordinates:

(-2,-1), (2, -1), (-2, 3)

Translation: Left 3, down 3

Finishing co-ordinates:

(-5, -4), (-1, -4), (-5,0)

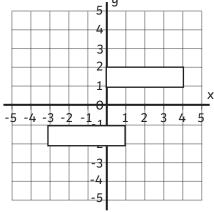
Starting co-ordinates:

(-2,2), (-1,3), (-2,4), (-3,3)

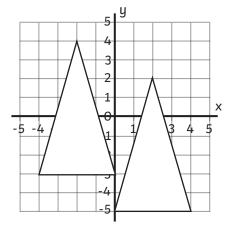
Translation: Right 3, down 5

Finishing co-ordinates:

(1,-3), (2,-2), (1,-1), (0,-2)



What are the co-ordinates of the new shape? **(0, 1), (4,1), (4,2), (0,2)** 



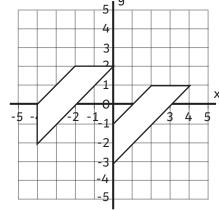
What are the co-ordinates of the new shape? (2,2), (0,-5), (4, -5)

Starting co-ordinates:

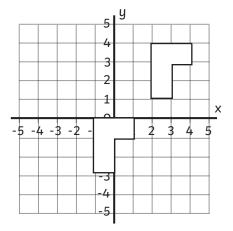
Translation: Right 1, down 4

Finishing co-ordinates:

(0,-1), (-2, -1)



What are the co-ordinates of the new shape? (-2,2), (0,2), (-4,-2), (-4,0)



What are the co-ordinates of the new shape? (-1,-3), (0,-3), (0,-1), (1,-1), (1,0), (-1,0)





