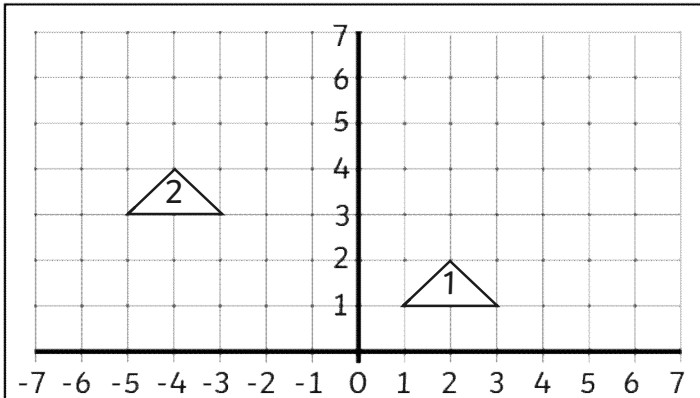


2D Shape Translations

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

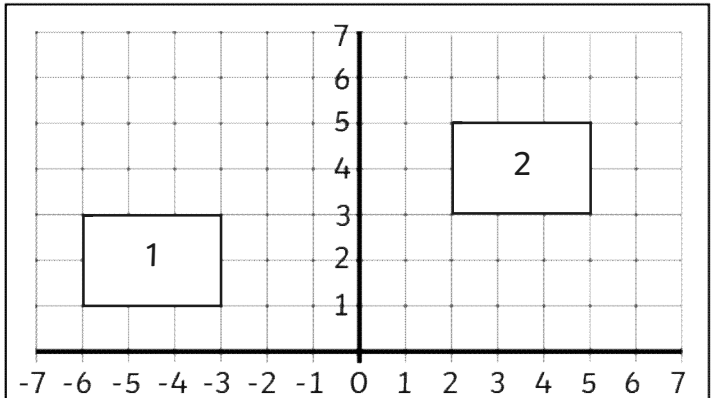
Describe the positions and translations of the 2D shapes.



Starting co-ordinates:

Translation:

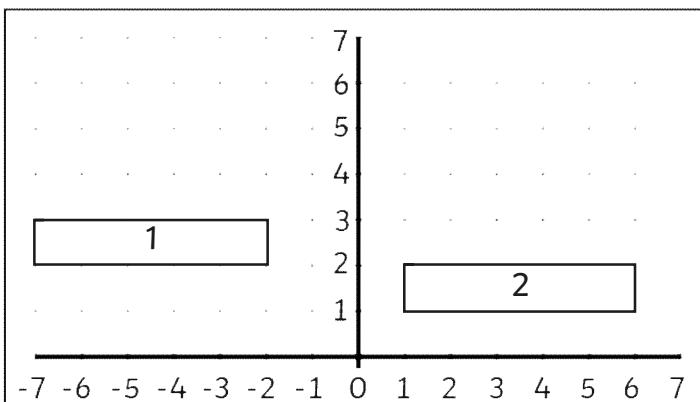
Finishing co-ordinates:



Starting co-ordinates:

Translation:

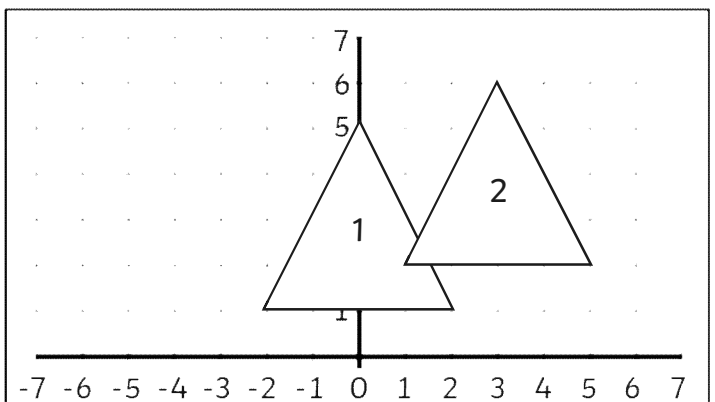
Finishing co-ordinates:



Starting co-ordinates:

Translation:

Finishing co-ordinates:



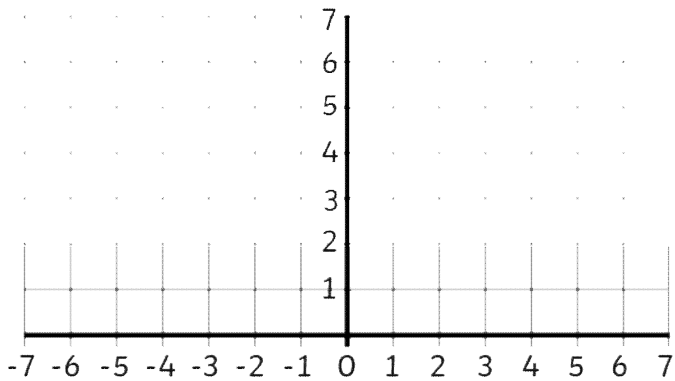
Starting co-ordinates:

Translation:

Finishing co-ordinates:

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

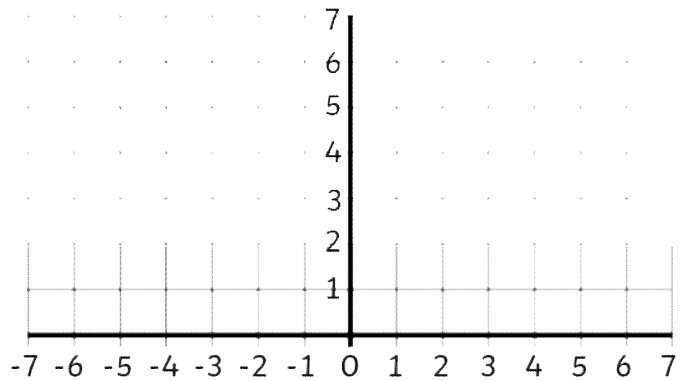
Plot these co-ordinates to reveal a shape:
 $(0,1)$, $(2,1)$, $(2,3)$, $(0,3)$



Translate the shape left 6, down 1.

What are the co-ordinates of the new shape?

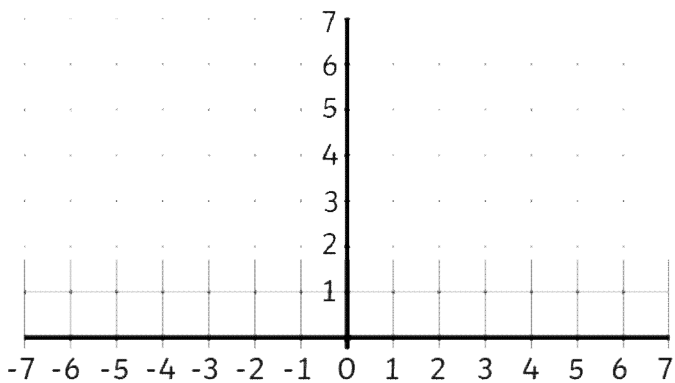
Plot these co-ordinates to reveal a shape:
 $(-2,3)$, $(-1,5)$, $(-3,5)$



Translate the shape right 4, down 2.

What are co-ordinates of the new shape?

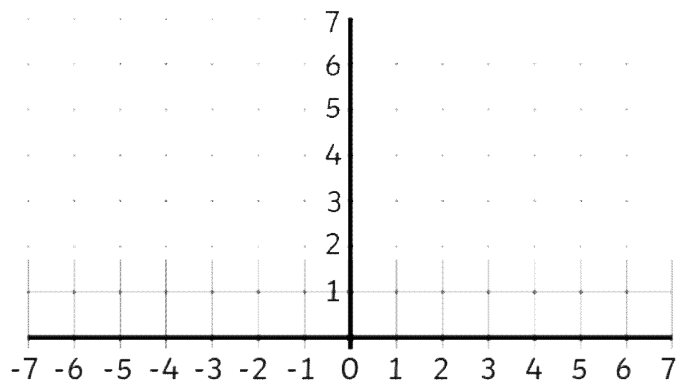
Plot these co-ordinates to reveal a shape:
 $(1,1)$, $(3,1)$, $(1,3)$



Translate the shape left 2, up 2.

What are the co-ordinates of the new shape?

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



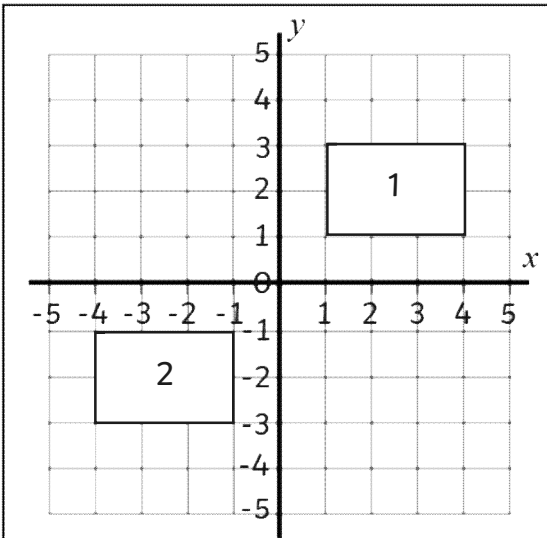
Translate the shape left 3, down 3.

What are the co-ordinates of the new shape?

2D Shape Translations

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

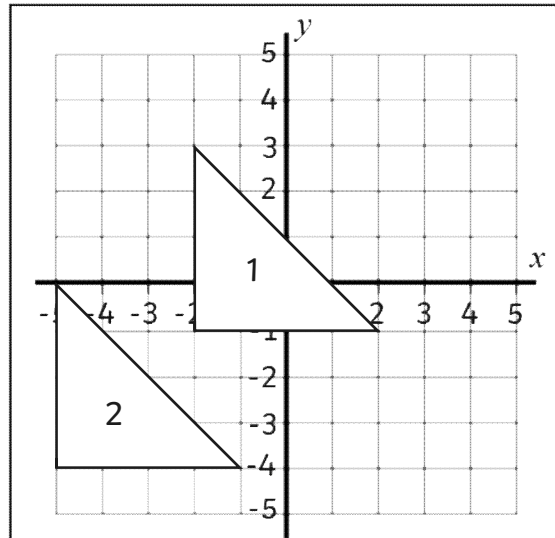
Describe the positions and translations of the 2D shapes.



Starting co-ordinates:

Translation:

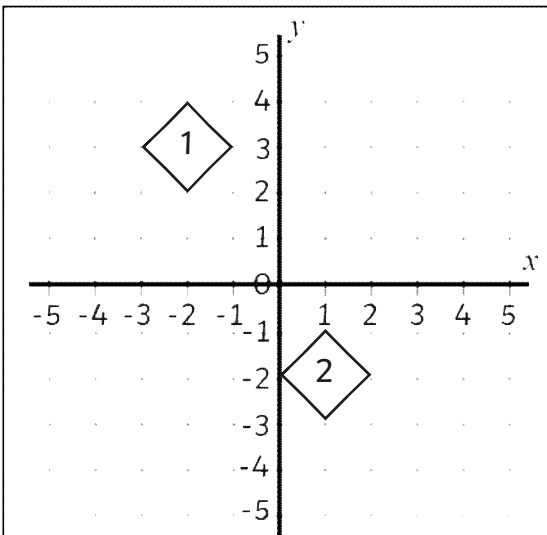
Finishing co-ordinates:



Starting co-ordinates:

Translation:

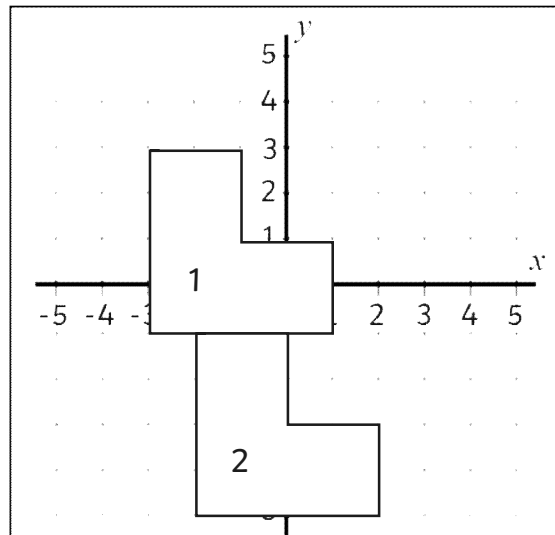
Finishing co-ordinates:



Starting co-ordinates:

Translation:

Finishing co-ordinates:



Starting co-ordinates:

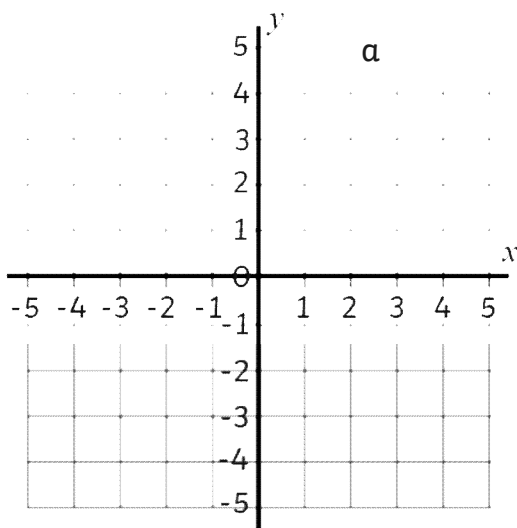
Translation:

Finishing co-ordinates:

Plot the following co-ordinates and follow the

translations to reveal shape.

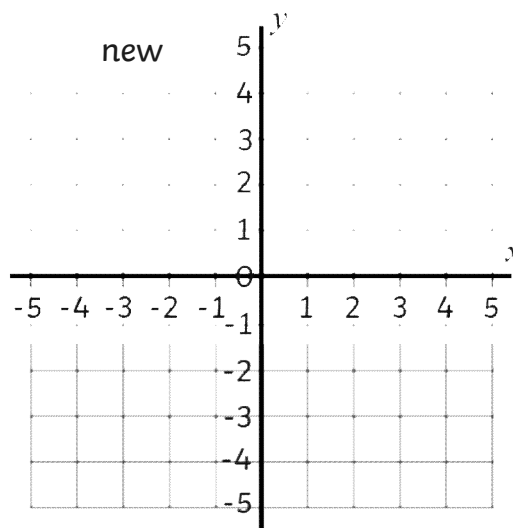
Plot these co-ordinates to reveal a shape: $(-3, -1)$, $(-3, -2)$, $(1, -1)$, $(1, -2)$



Translate the shape right 3, up 3.

What are the co-ordinates of the new shape?

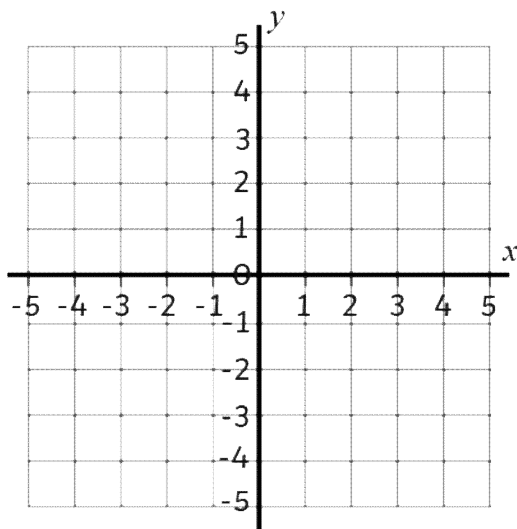
Plot these co-ordinates to reveal a shape: $(2, 1)$, $(4, 1)$, $(0, -3)$, $(0, -1)$



Translate the shape left 4, up 1.

What are the co-ordinates of the new shape?

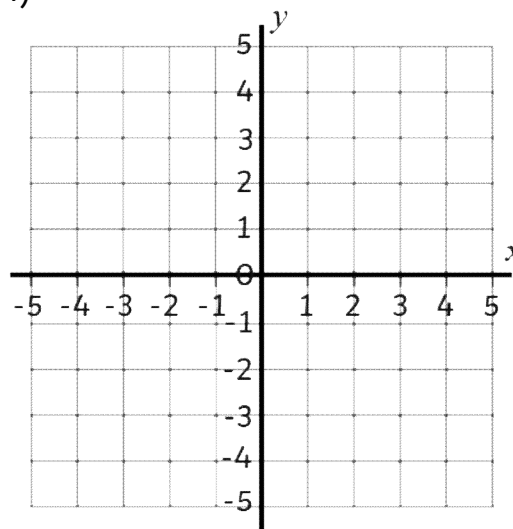
Plot these co-ordinates to reveal a shape: $(-2, 4)$, $(-4, -3)$, $(0, -3)$



Translate the shape right 4, down 2.

What are the co-ordinates of the new shape?

Plot these co-ordinates to reveal a shape: $(2, 1)$, $(3, 1)$, $(3, 3)$, $(4, 3)$, $(4, 4)$, $(2, 4)$



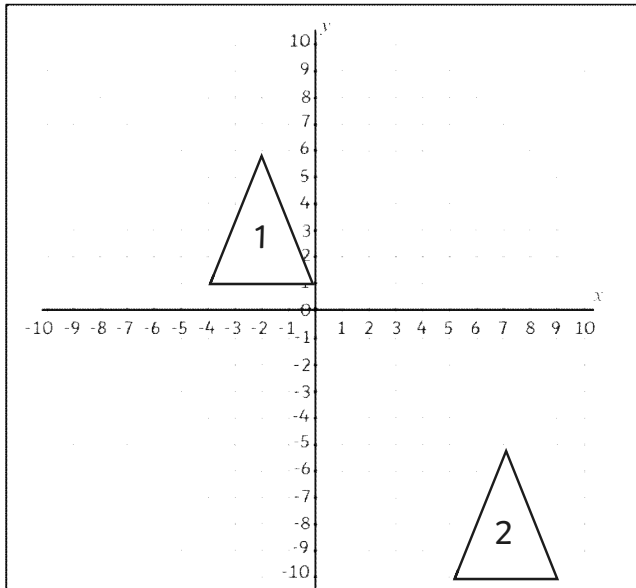
Translate the shape left 3, down 4.

What are the co-ordinates of the new shape?

2D Shape Translations

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

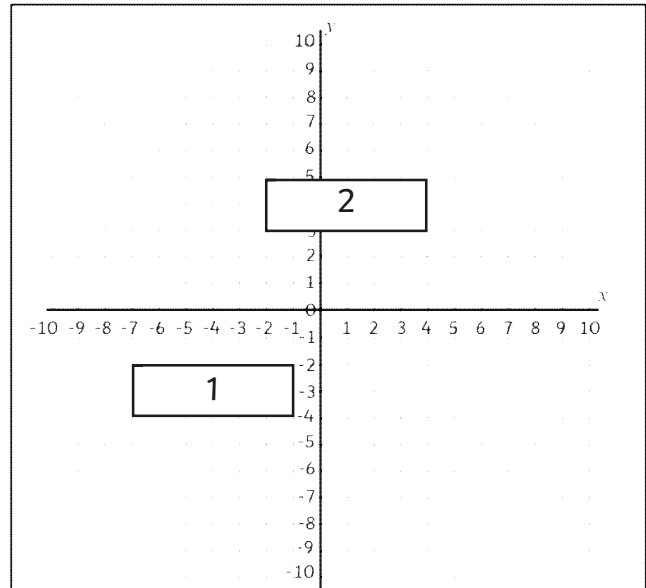
Describe the positions and translations of the 2D shapes.



Starting co-ordinates:

Translation:

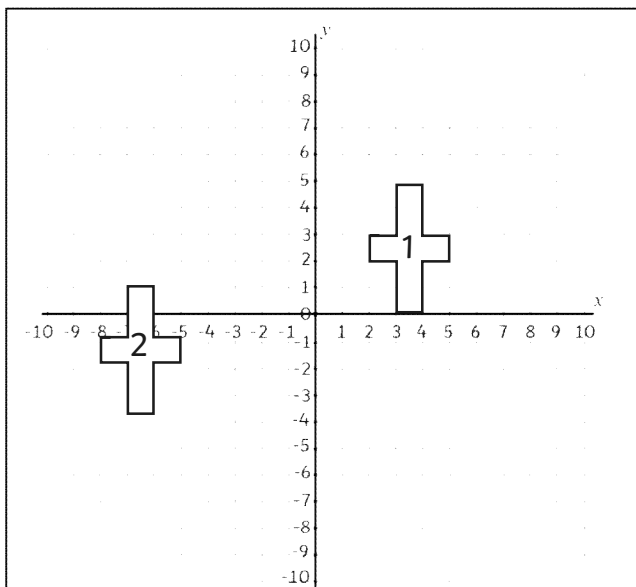
Finishing co-ordinates:



Starting co-ordinates:

Translation:

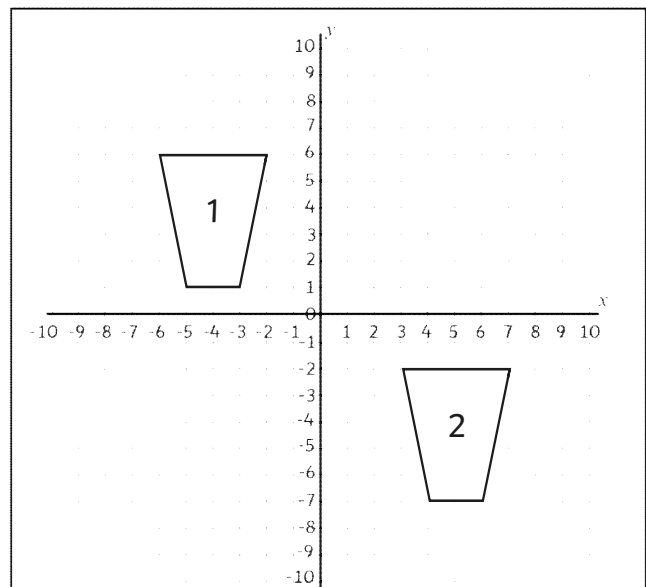
Finishing co-ordinates:



Starting co-ordinates:

Translation:

Finishing co-ordinates:



Starting co-ordinates:

Translation:

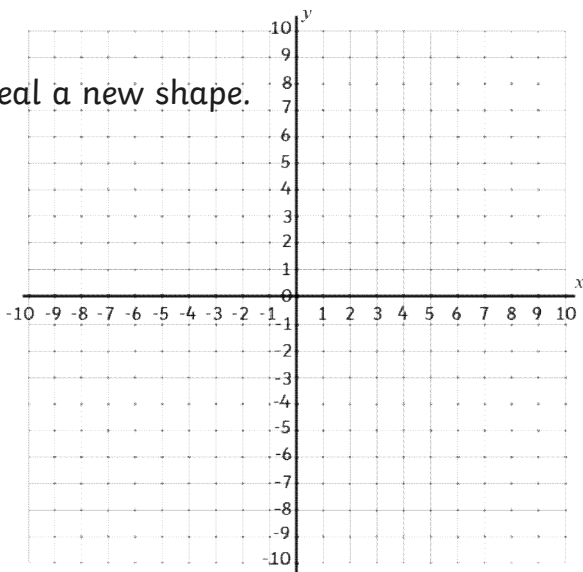
Finishing co-ordinates:

Plot the following co-ordinates and follow the

translations to

Plot these co-ordinates to reveal a shape: $(-8,-5)$, $(-4,-5)$, $(-4,-3)$, $(-6,-3)$, $(-6,3)$, $(-8,3)$

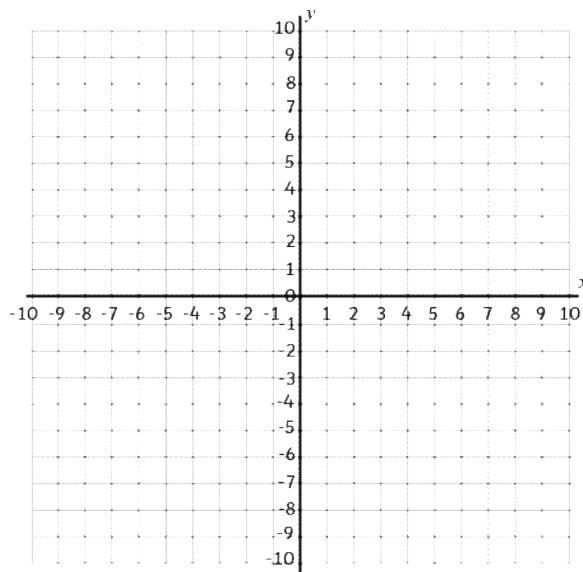
reveal a new shape.



Translate the shape right 3, down 2.

What are the co-ordinates of the new shape?

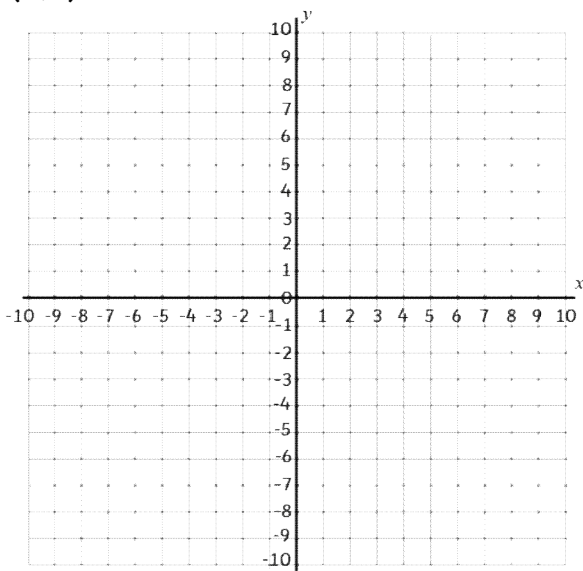
Plot these co-ordinates to reveal a shape: $(-2,-6)$, $(-5,-2)$, $(-8,-6)$, $(-5,-10)$



Translate the shape right 6, up 9.

What are the co-ordinates of the new shape?

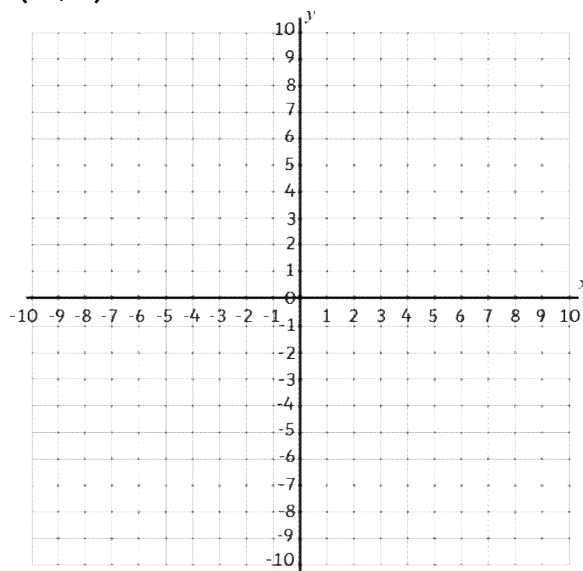
Plot these co-ordinates to reveal a shape: $(5,3)$, $(8,3)$, $(9,5)$, $(8,7)$, $(5,7)$, $(4,5)$



Translate the shape left 9, down 5.

What are the co-ordinates of the new shape?

Plot these co-ordinates to reveal a shape: $(-3,-1)$, $(-5,2)$, $(-7,5)$, $(-3,5)$, $(-7,-1)$



Translate the shape left 3, up 5.

What are the co-ordinates of the new shape?

2D Shape Translations Answers

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:
 $(-7, 2)$, $(-2,2)$, $(-2, 3)$, $(-7,3)$

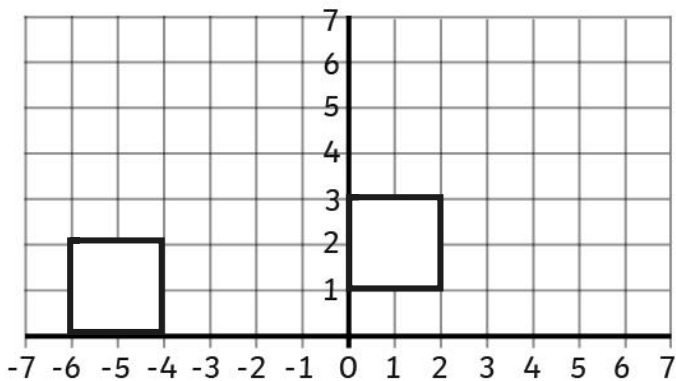
Translation: **Right 8, down 1**

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

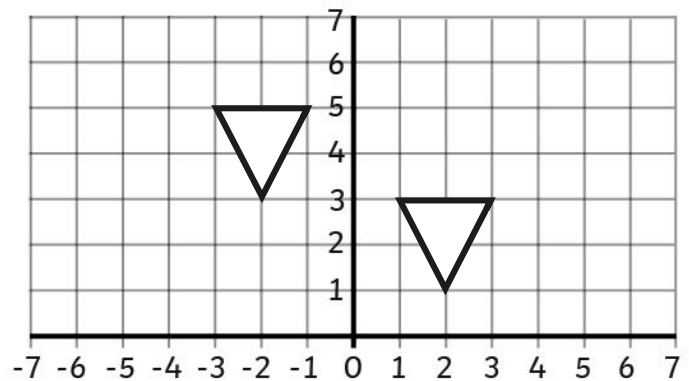
Starting co-ordinates: $(-2,1)$, $(2,1)$, $(0,5)$

Translation: **Right 3, up 1**

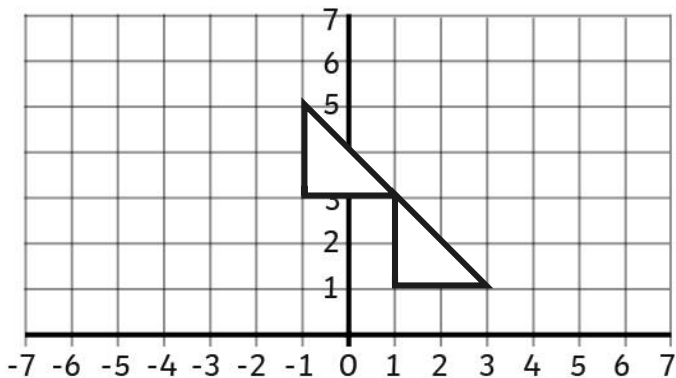
Finishing co-ordinates: $(1,2)$, $(5,2)$, $(3,6)$



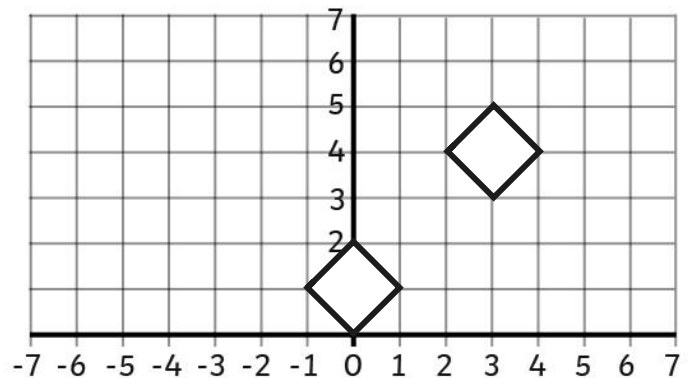
What are the co-ordinates of the new shape? $(-6,0)$, $(-4,0)$, $(-4,2)$, $(-6,2)$



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

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)

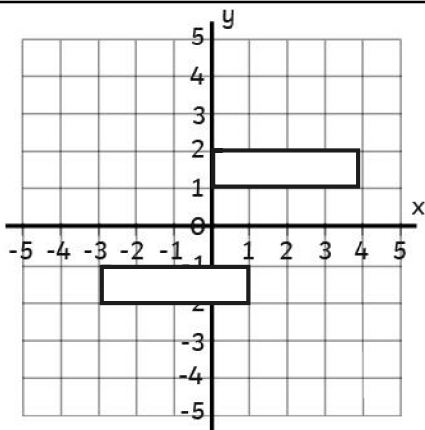
Starting co-ordinates:

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

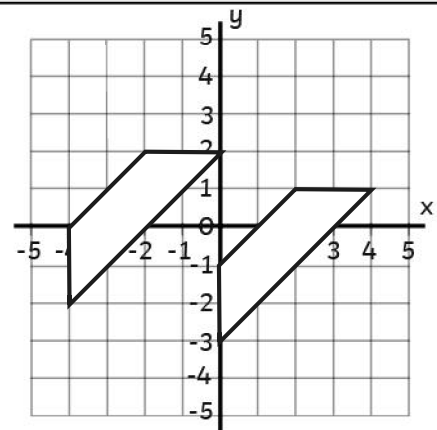
Translation: **Right 1, down 4**

Finishing co-ordinates:

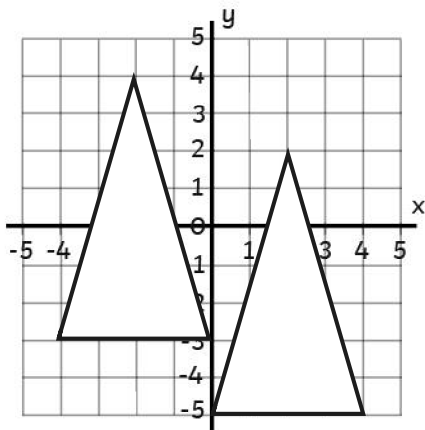
(-2,-5), (2,-5), (2,3), (0,-3), (0,-1), (-2,-1)



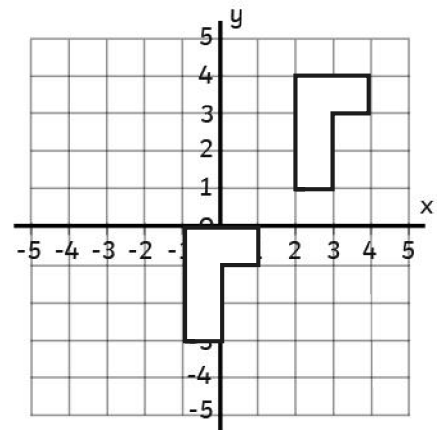
What are the co-ordinates of the new shape? **(0, 1), (4,1), (4,2), (0,2)**



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



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



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

2D Shape Translations Answers

Starting co-ordinates: $(-4,1)$, $(0,1)$, $(-2,6)$

Translation: **Right 9, down 11**

Finishing co-ordinates:
 $(5,-10)$, $(9,-10)$, $(7,-5)$

Starting co-ordinates:
 $(-7,-4)$, $(-1,-4)$, $(-1,-2)$, $(-7,-2)$

Translation: **Right 5, up 7**

Finishing co-ordinates:
 $(-2,3)$, $(4,3)$, $(4,5)$, $(-2,5)$

Starting co-ordinates: $(3,0)$, $(4,0)$, $(4,2)$,
 $(5,2)$, $(5,3)$, $(4,3)$, $(4,5)$, $(3,5)$, $(3,3)$,
 $(2,3)$, $(2,2)$, $(3,2)$

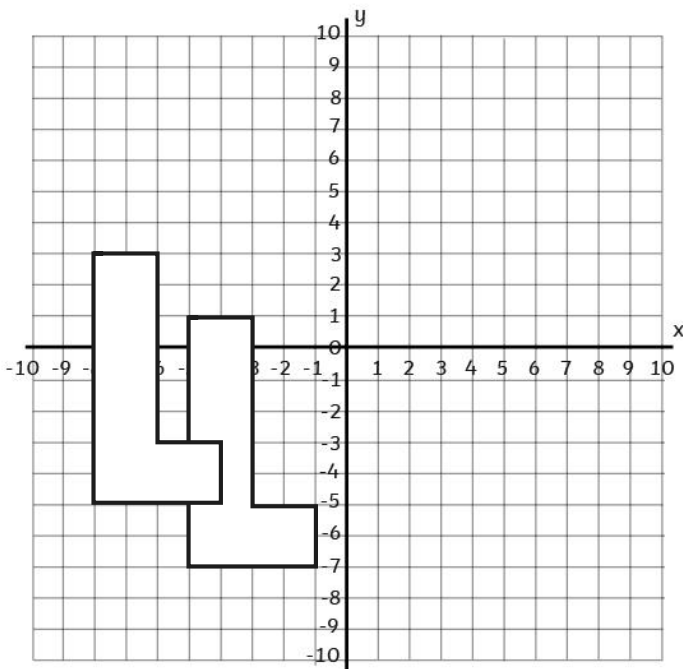
Translation: **Left 10, down 4**

Finishing co-ordinates: $(-7,-4)$, $(-6,-4)$,
 $(-6,-2)$, $(-5,-2)$, $(-5,-1)$, $(-6,-1)$, $(-6,1)$,
 $(-7,1)$, $(-7,-1)$, $(-8,-1)$, $(-8,-2)$, $(-7,-2)$

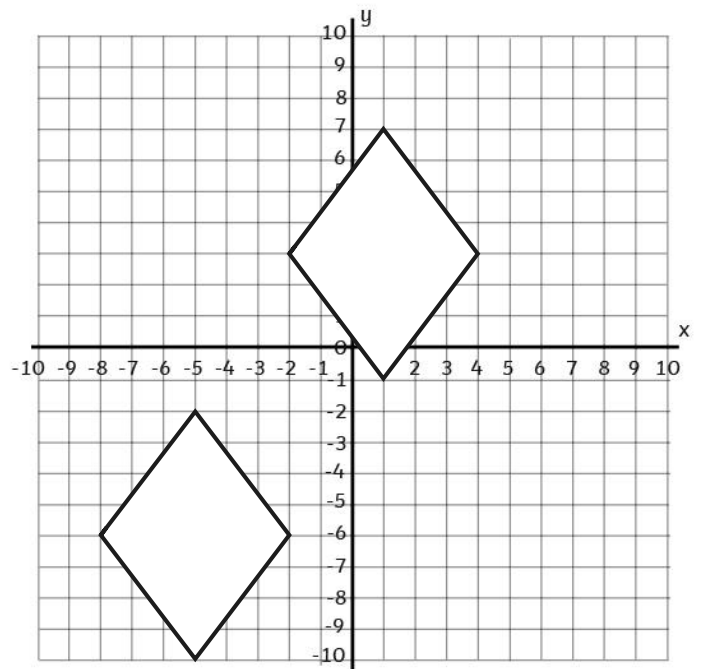
Starting co-ordinates:
 $(-5,1)$, $(-3,1)$, $(-2,6)$ $(-6,6)$

Translation: **Right 9, down 8**

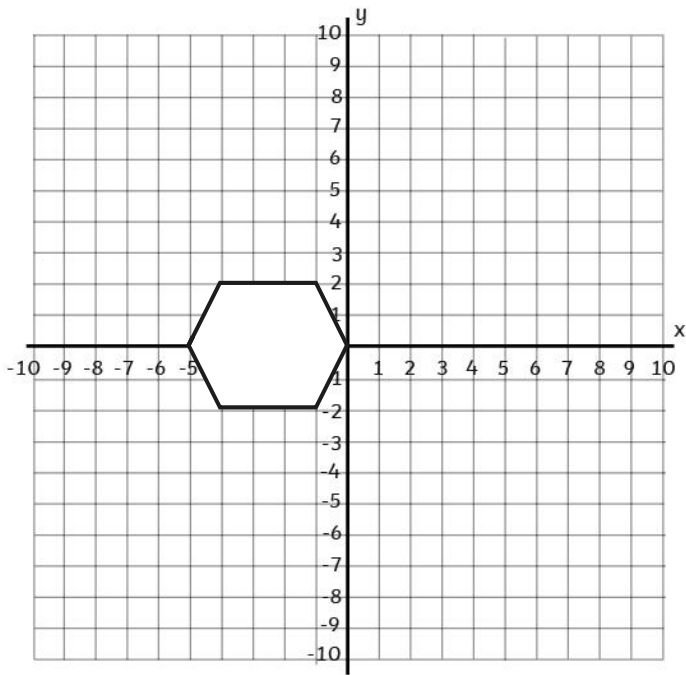
Finishing co-ordinates:
 $(4,-7)$, $(6,-7)$, $(7,-2)$, $(3,-2)$



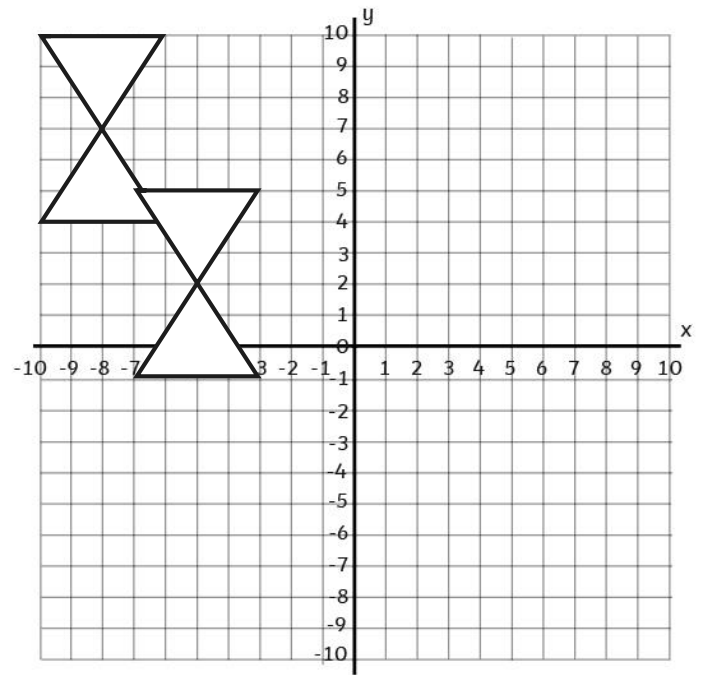
What are the co-ordinates of the new shape?
 $(-5,-7)$, $(-1,-7)$, $(-1,-5)$, $(-3,-5)$, $(-3,1)$, $(-5,1)$



What are the co-ordinates of the new shape?
 $(4,3)$, $(1,7)$, $(-2,3)$, $(1,-1)$



What are the co-ordinates of the new shape?
 (-4,-2), (-1,-2), (0,0), (-1,2), (-4,2), (-5,0)



What are the co-ordinates of the new shape?
 (-6,4), (-8,7), (-10,10), (-6,10), (-10,4)