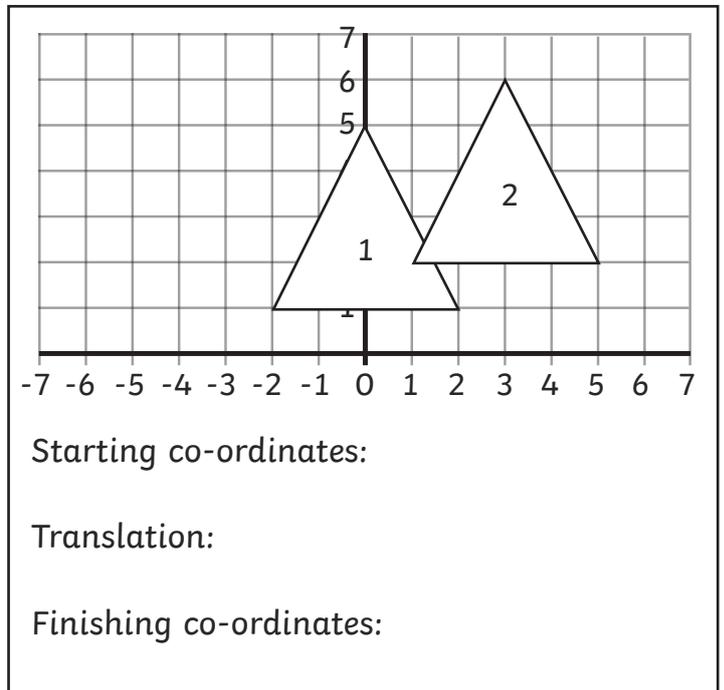
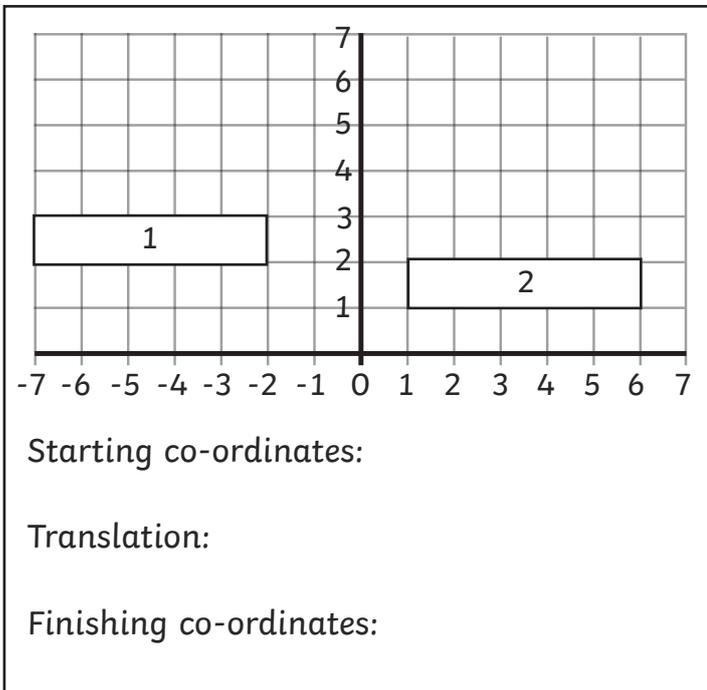
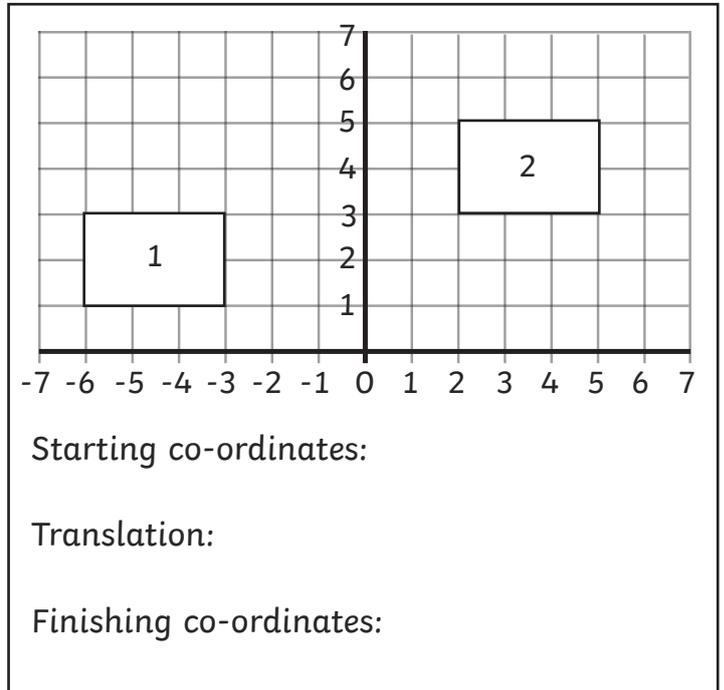
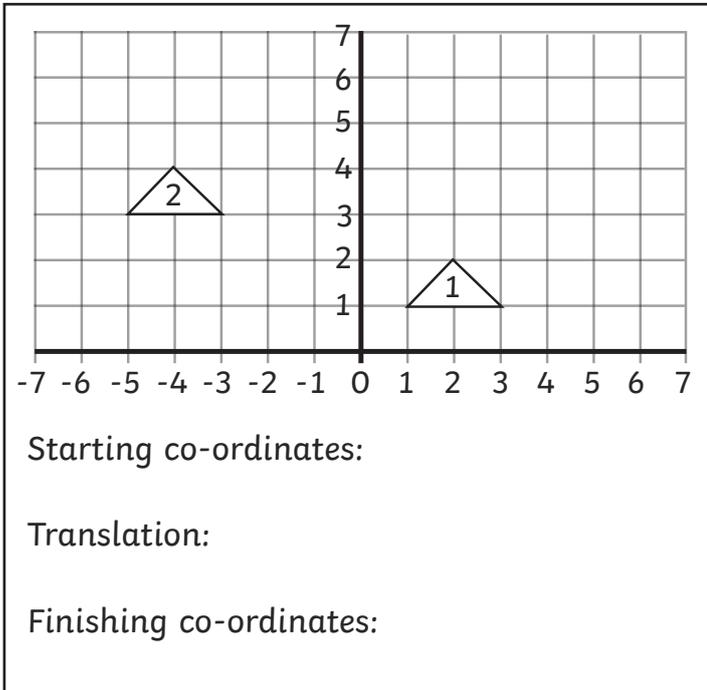


2D Shape Translations

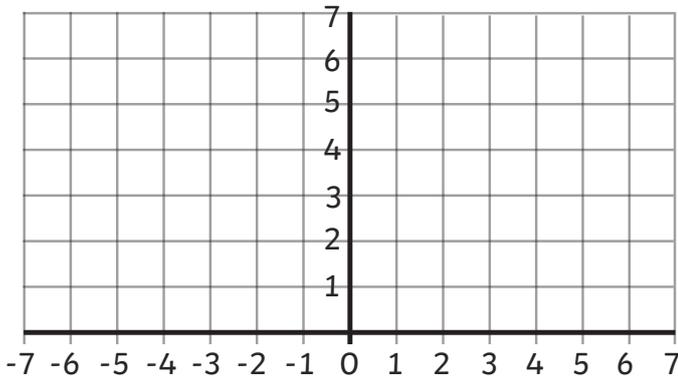
I can describe the translation of a 2D shape on a two-quadrant co-ordinate grid.

Describe the positions and translations of the 2D shapes.



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

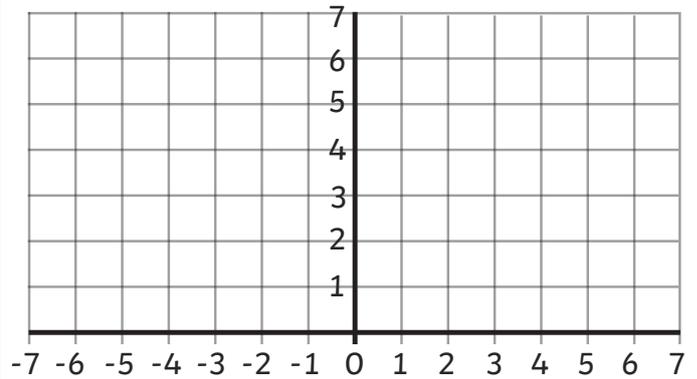
Plot these co-ordinates to reveal a shape:
 $(0,1)$, $(2,1)$, $(2,3)$, $(0,3)$



Translate the shape left 6, down 1.

What are the co-ordinates of the new shape?

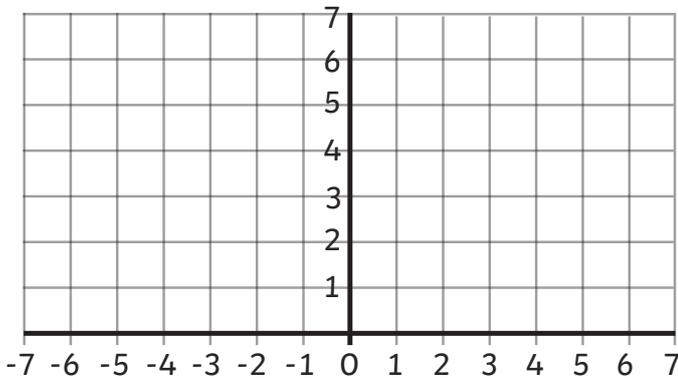
Plot these co-ordinates to reveal a shape:
 $(-2, 3)$, $(-1, 5)$, $(-3, 5)$



Translate the shape right 4, down 2.

What are co-ordinates of the new shape?

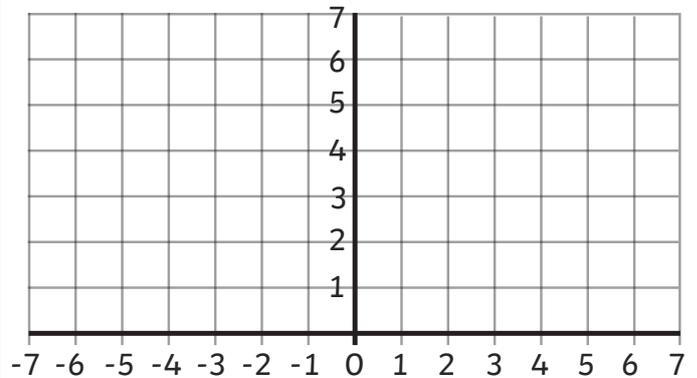
Plot these co-ordinates to reveal a shape:
 $(1,1)$, $(3,1)$, $(1,3)$



Translate the shape left 2, up 2.

What are the co-ordinates of the new shape?

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



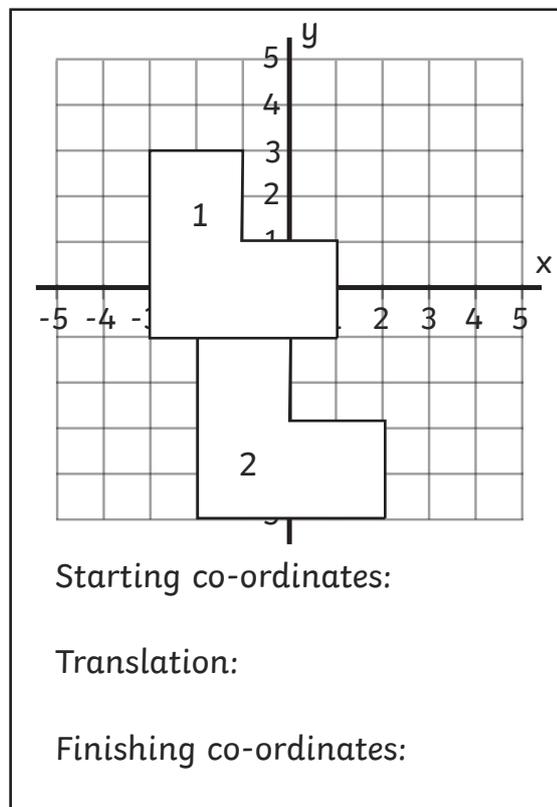
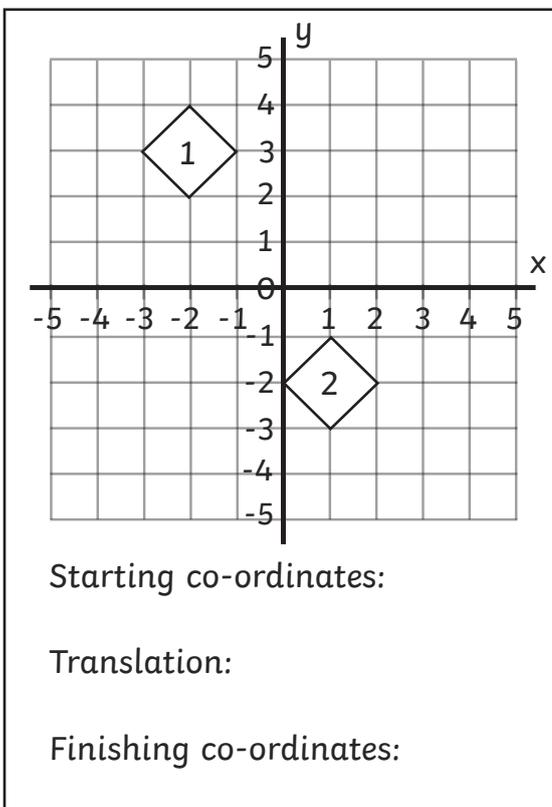
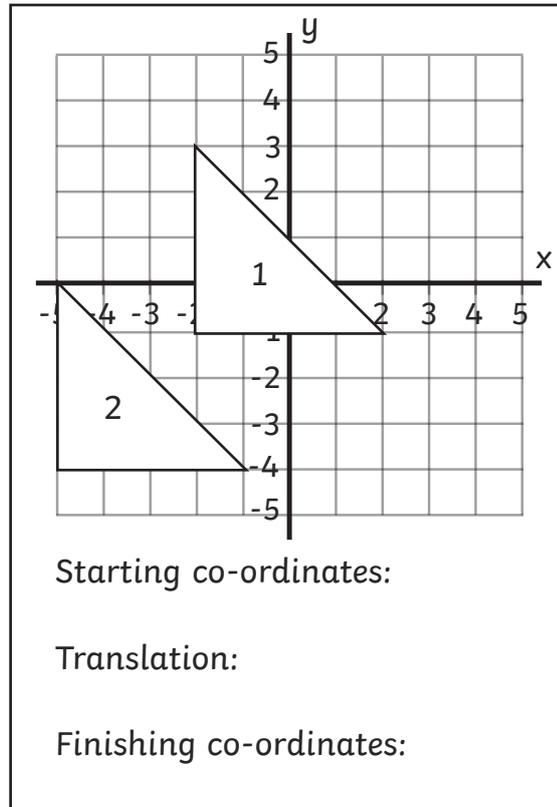
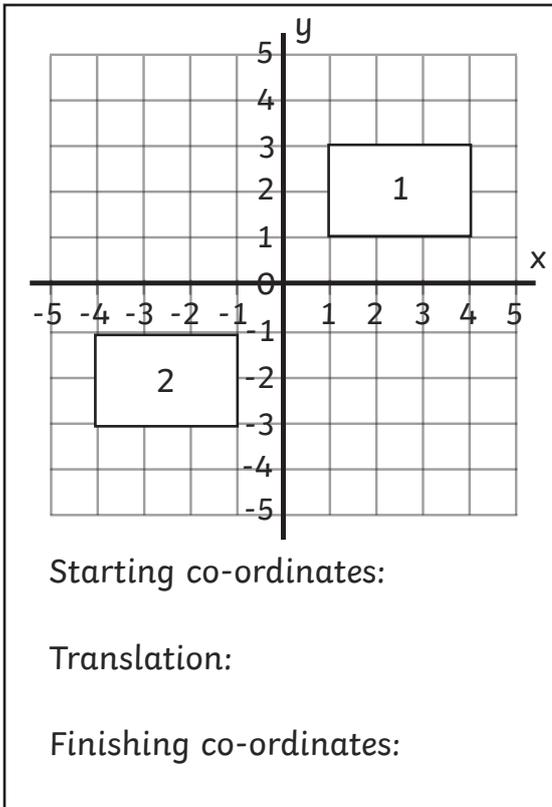
Translate the shape left 3, down 3.

What are the co-ordinates of the new shape?

2D Shape Translations

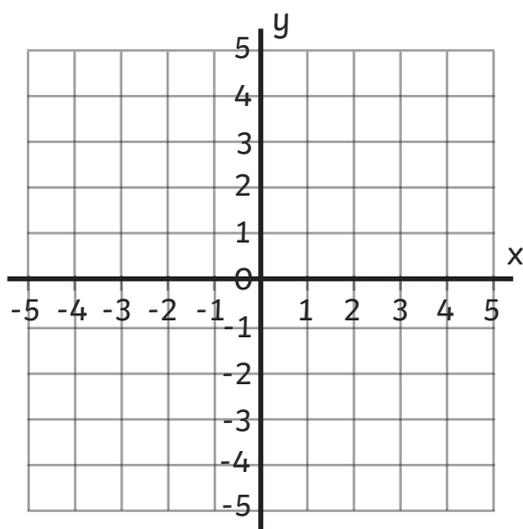
I can describe the translation of a 2D shape on a four-quadrant co-ordinate grid.

Describe the positions and translations of the 2D shapes.



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

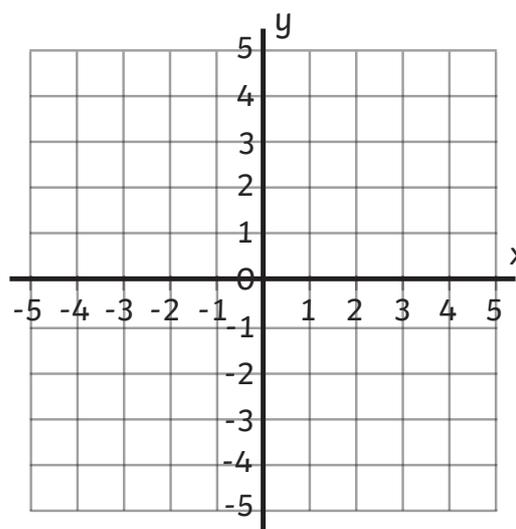
Plot these co-ordinates to reveal a shape: $(-3,-1)$, $(-3,-2)$, $(1,-1)$, $(1,-2)$



Translate the shape right 3, up 3.

What are the co-ordinates of the new shape?

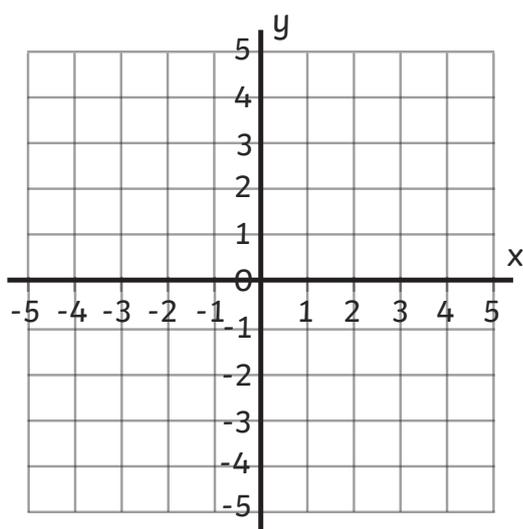
Plot these co-ordinates to reveal a shape: $(2,1)$, $(4,1)$, $(0,-3)$, $(0,-1)$



Translate the shape left 4, up 1.

What are the co-ordinates of the new shape?

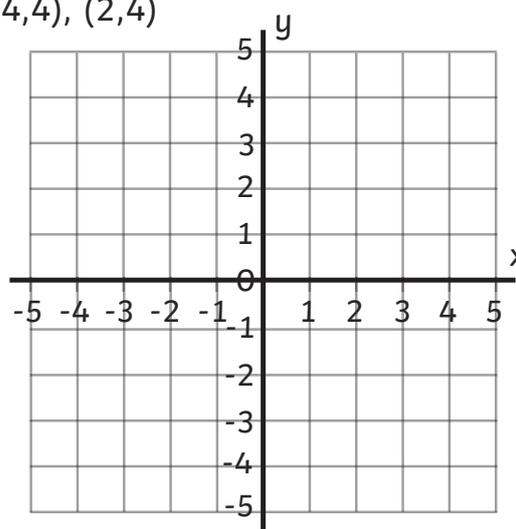
Plot these co-ordinates to reveal a shape: $(-2,4)$, $(-4,-3)$, $(0,-3)$



Translate the shape right 4, down 2.

What are the co-ordinates of the new shape?

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



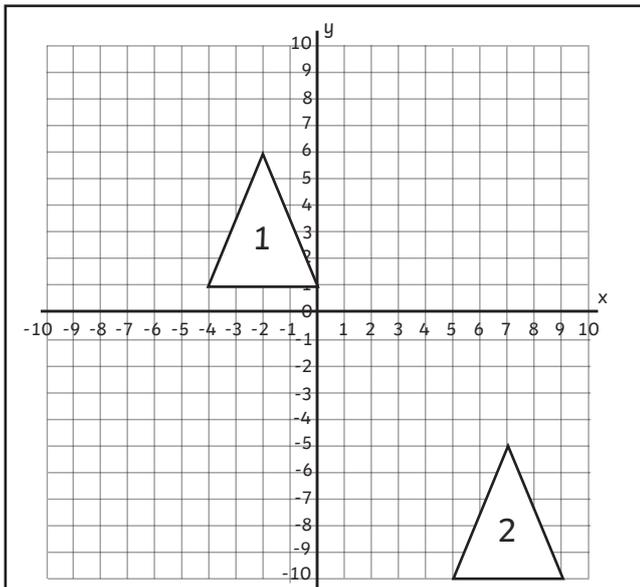
Translate the shape left 3, down 4.

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.

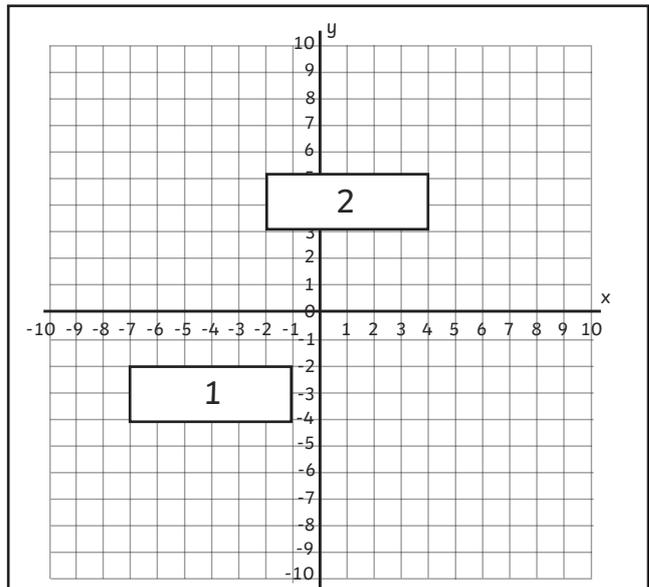
Describe the positions and translations of the 2D shapes.



Starting co-ordinates:

Translation:

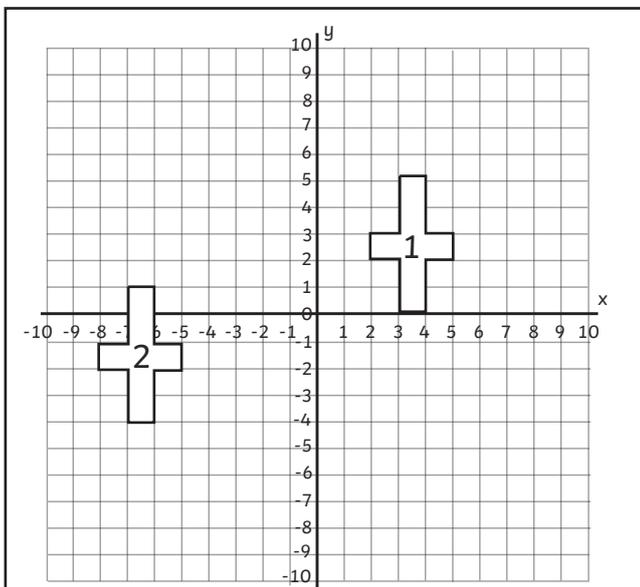
Finishing co-ordinates:



Starting co-ordinates:

Translation:

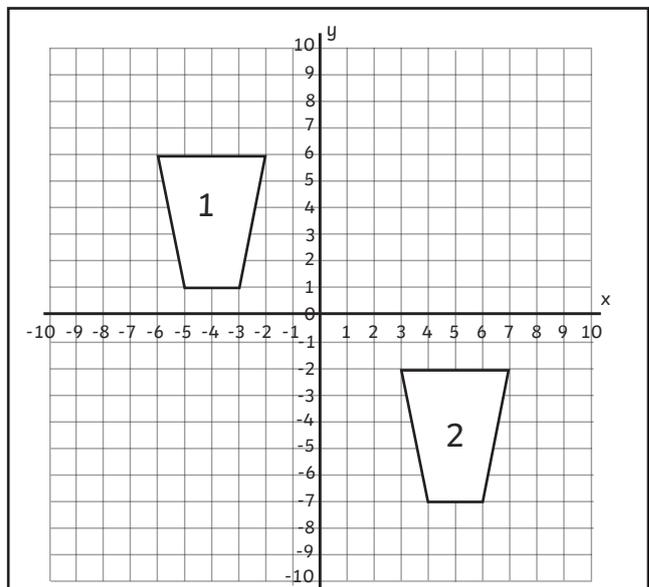
Finishing co-ordinates:



Starting co-ordinates:

Translation:

Finishing co-ordinates:



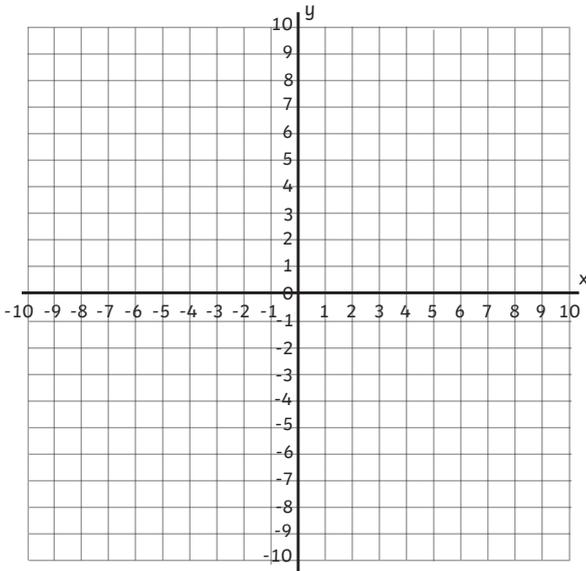
Starting co-ordinates:

Translation:

Finishing co-ordinates:

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

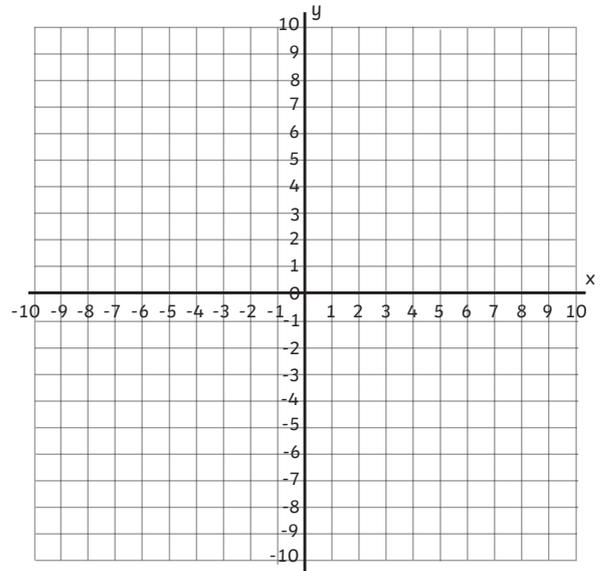
Plot these co-ordinates to reveal a shape: $(-8,-5)$, $(-4,-5)$, $(-4,-3)$, $(-6,-3)$, $(-6,3)$, $(-8,3)$



Translate the shape right 3, down 2.

What are the co-ordinates of the new shape?

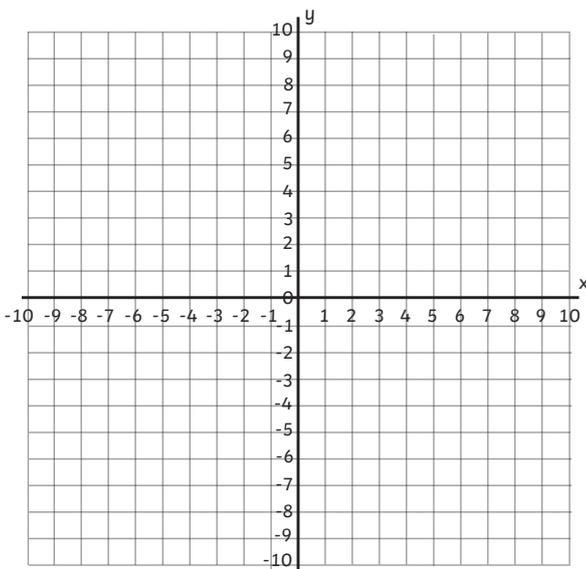
Plot these co-ordinates to reveal a shape: $(-2,-6)$, $(-5,-2)$, $(-8,-6)$, $(-5,-10)$



Translate the shape right 6, up 9.

What are the co-ordinates of the new shape?

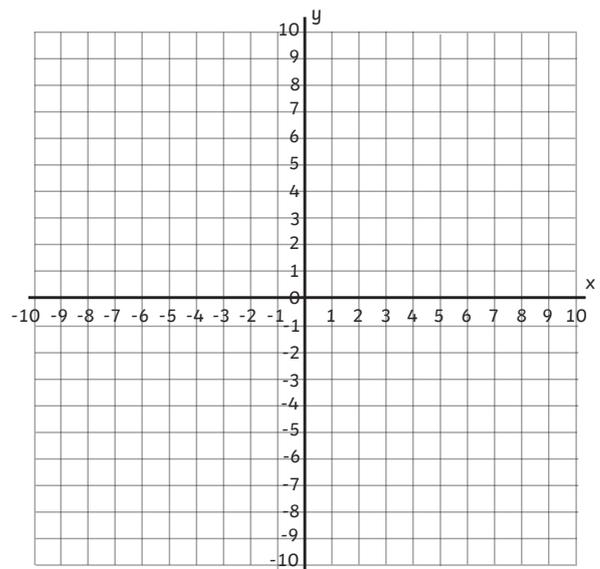
Plot these co-ordinates to reveal a shape: $(5,3)$, $(8,3)$, $(9,5)$, $(8,7)$, $(5,7)$, $(4,5)$



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

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)

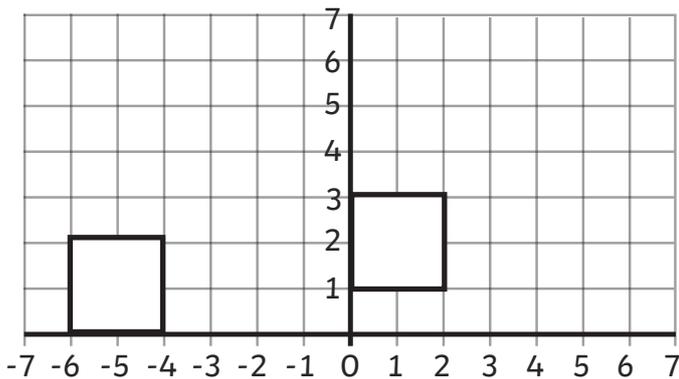
Translation: **Right 8, down 1**

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

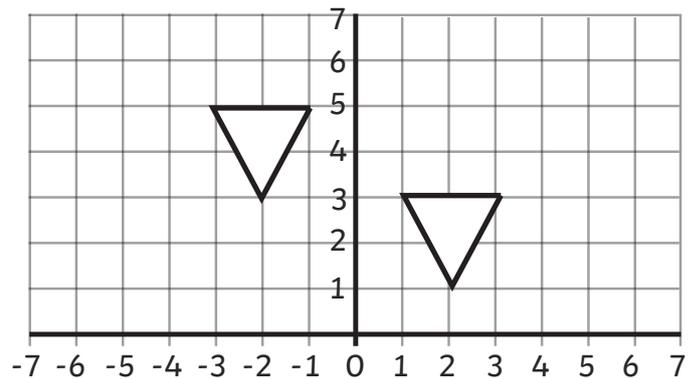
Starting co-ordinates: **(-2,1), (2,1), (0,5)**

Translation: **Right 3, up 1**

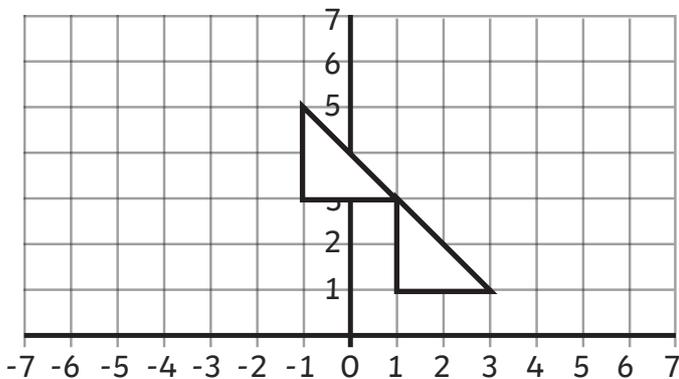
Finishing co-ordinates: **(1,2), (5,2), (3,6)**



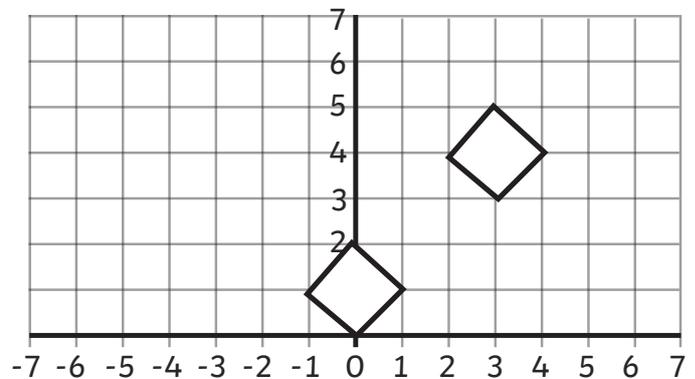
What are the co-ordinates of the new shape? **(-6,0), (-4,0), (-4,2), (-6,2)**



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)

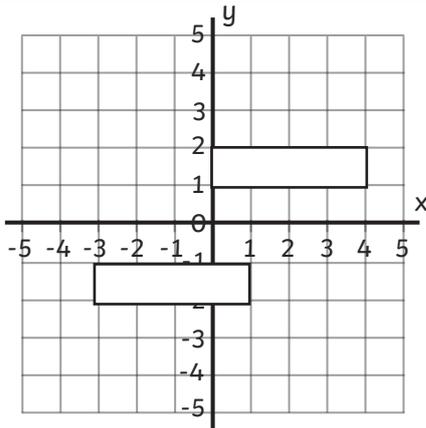
Starting co-ordinates:

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

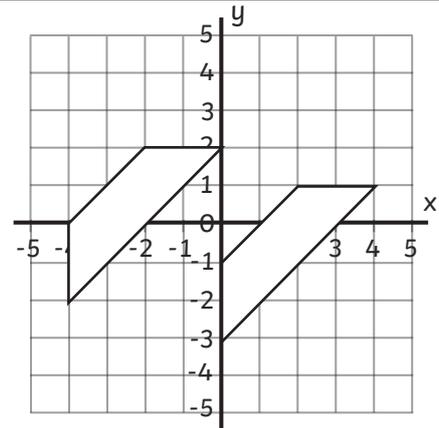
Translation: **Right 1, down 4**

Finishing co-ordinates:

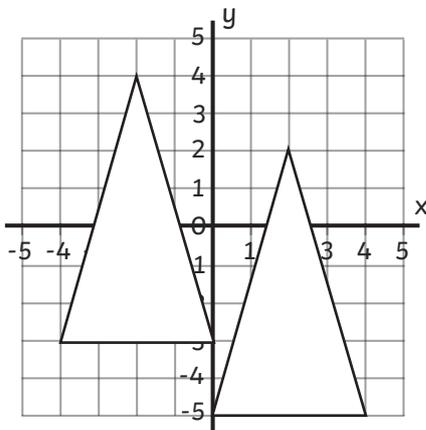
(-2,-5), (2,-5), (2,3), (0,-3), (0,-1), (-2,-1)



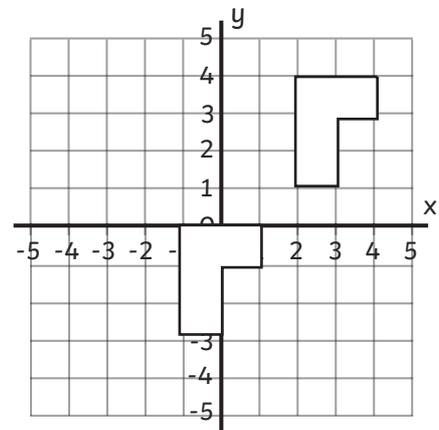
What are the co-ordinates of the new shape? **(0, 1), (4,1), (4,2), (0,2)**



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

Describe the positions and translations of the 2D shapes.

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: $(3,0)$, $(4,0)$, $(4,2)$,
 $(5,2)$, $(5,3)$, $(4,3)$, $(4,5)$, $(3,5)$, $(3,3)$,
 $(2,3)$, $(2,2)$, $(3,2)$

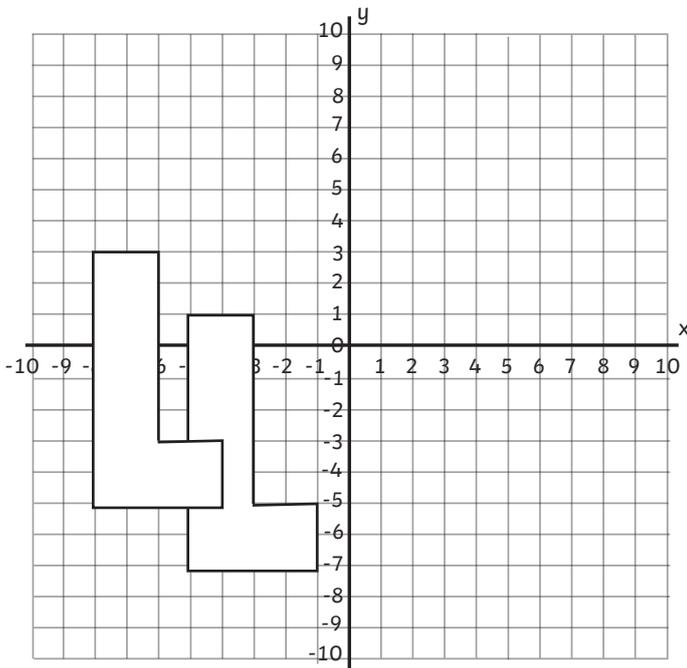
Translation: **Left 10, down 4**

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

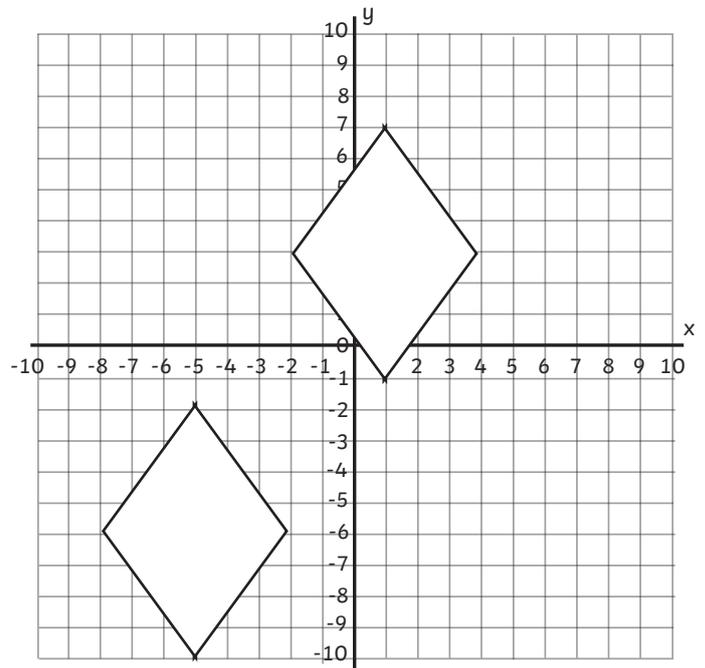
Starting co-ordinates:
 $(-5,1)$, $(-3,1)$, $(-2,6)$, $(-6,6)$,

Translation: **Right 9, down 8**

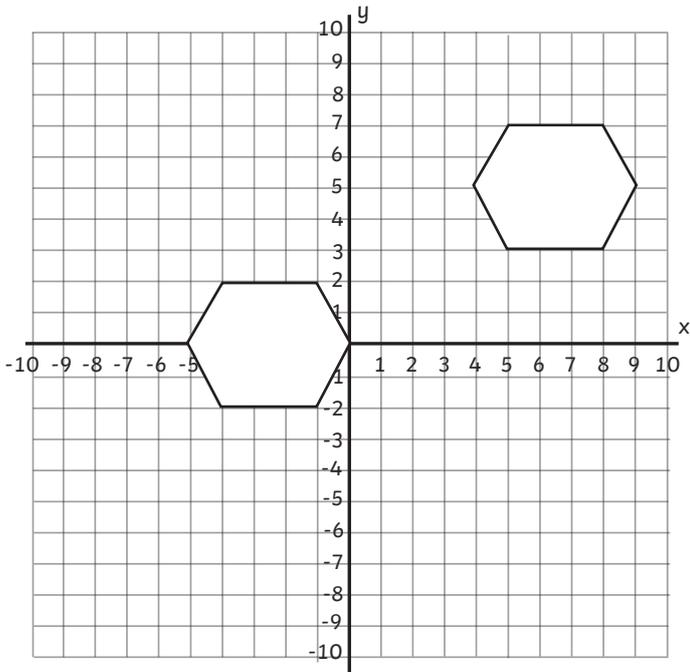
Finishing co-ordinates:
 $(4,-7)$, $(6,-7)$, $(7,-2)$, $(3,-2)$



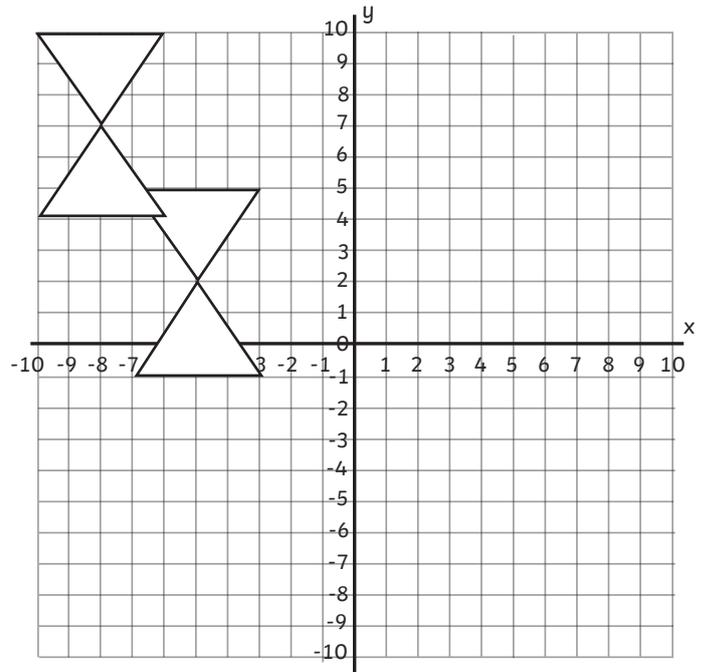
What are the co-ordinates of the new shape?
 $(-5,-7)$, $(-1,-7)$, $(-1,-5)$, $(-3,-5)$,
 $(-3,1)$, $(-5,1)$



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?
 $(-6,4)$, $(-8,7)$, $(-10,10)$, $(-6,10)$, $(-10,4)$