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.

2

2

2

1

2

1

1

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:

1

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

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

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

Translate the shape left 2, up 2.

What are the co-ordinates of the new shape?

Translate the shape left 3, down 3.

What are the co-ordinates of the new shape?

Translate the shape right 4, down 2.

What are co-ordinates of the new shape?

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)

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

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.

2

1

2

1

1

1

2

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:

2

Plot the following co-ordinates and follow the translations to reveal a 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?

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, 4), (-4, -3), (0, -3)

Translate the shape left 4, up 1.

What are the co-ordinates of the new shape?

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)

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

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.

2

1

2

1

2

1

1

2

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: (-2,-6), (-5,-2), (-8,-6), (-5,-10)

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

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

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?

Translate the shape left 3, up 5.

What are the co-ordinates of the new shape?

Translate the shape right 3, down 2.

What are the co-ordinates of the new shape?

Translate the shape right 6, up 9.

What are the co-ordinates of the new shape?

2D Shape Translations Answers

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? **(0,0), (1,1), (0,2), (-1,1)**

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

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)**

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: **(1,1), (3,1), (2,2)**

Translation: **Left 6, up 2**

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

2D Shape Translations Answers

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

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? **(0, 1), (4,1), (4,2), (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)**

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)**

2D Shape Translations **Answers**

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?  
**(-5,-7), (-1,-7), (-1,-5), (-3,-5), (-3,1), (-5,1)**

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)**

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: **(-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)**

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

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