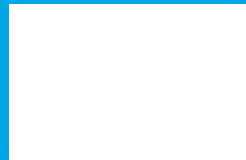


Translation of shapes



Aim

- To be able to describe how a shape has been translated.

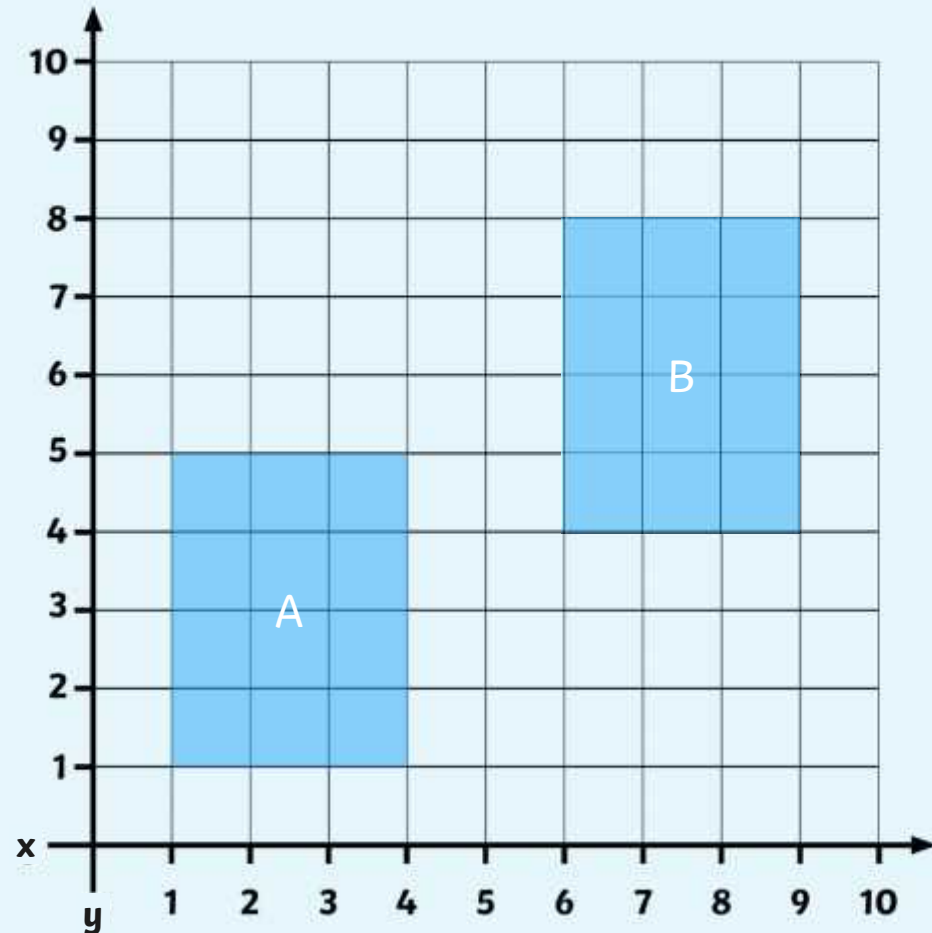
Success Criteria

- To know what translation of a shape means.
- To know how to describe how a shape has been translated.

What Is a Translation?

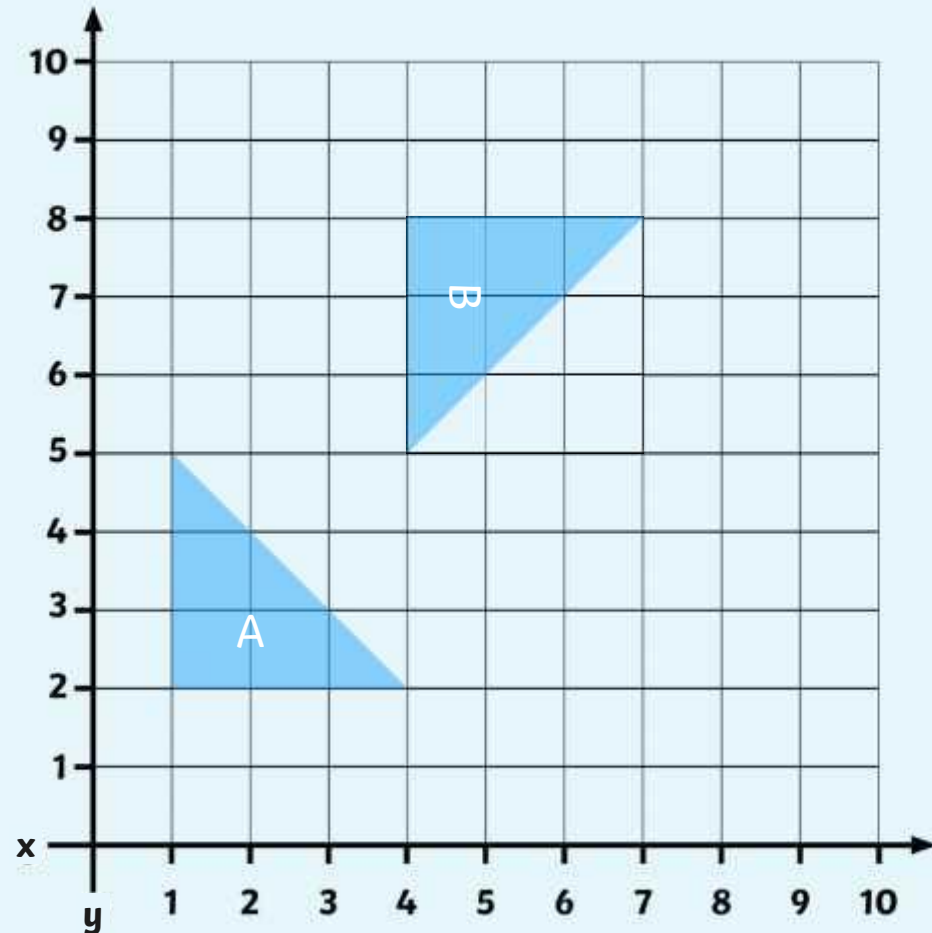
A translation is when a shape **moves from one position to another without being rotated or flipped.**

On this grid, rectangle A has been moved to position B.



What Is a Translation?

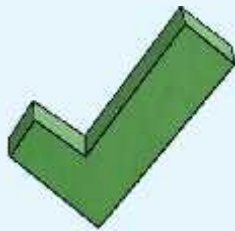
This is **not** a translation because the **shape has been rotated**.



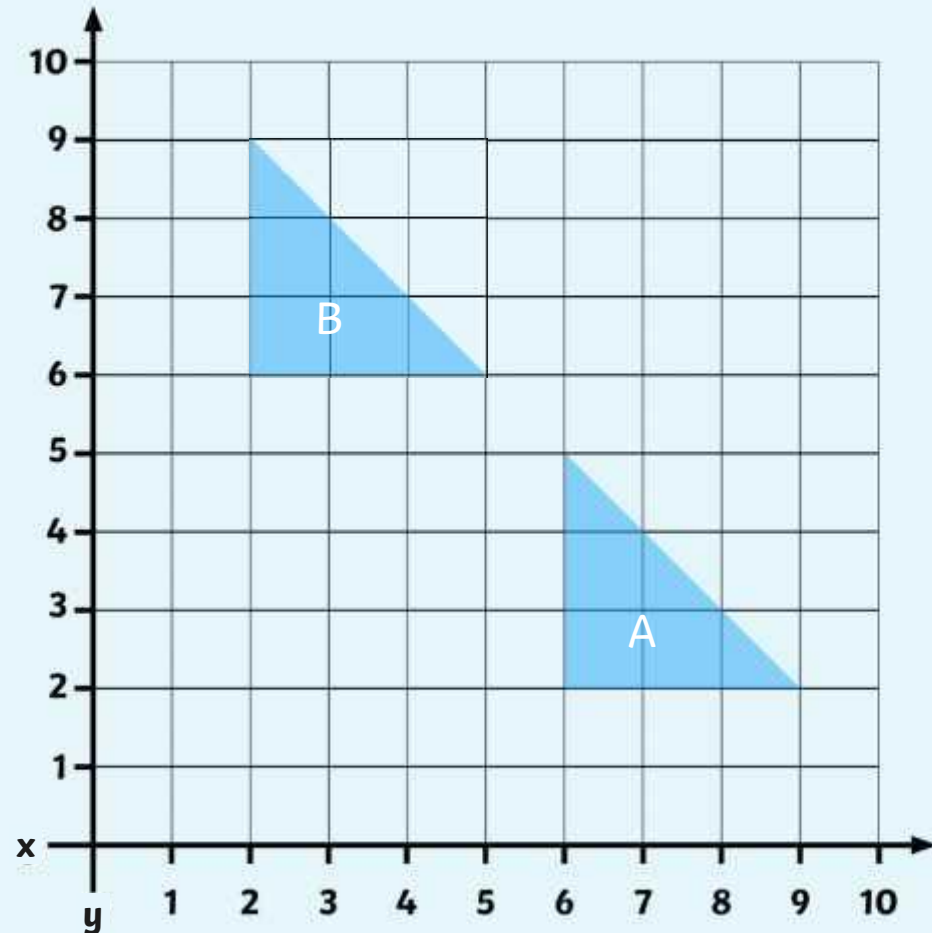
Translating Shapes

Is this a translation?

Yes



This is a translation.



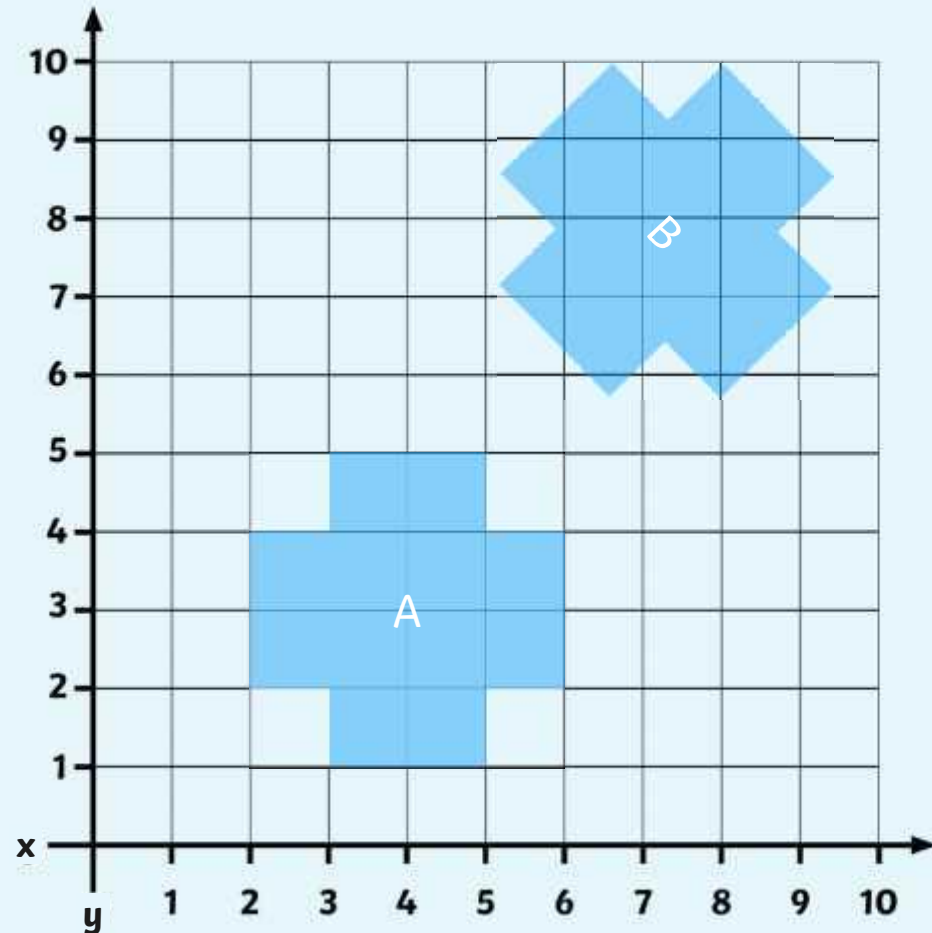
Translating Shapes

Is this a translation?

No



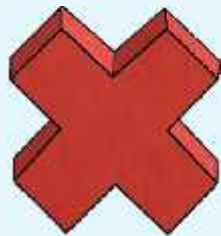
This is not a translation because the shape has been rotated.



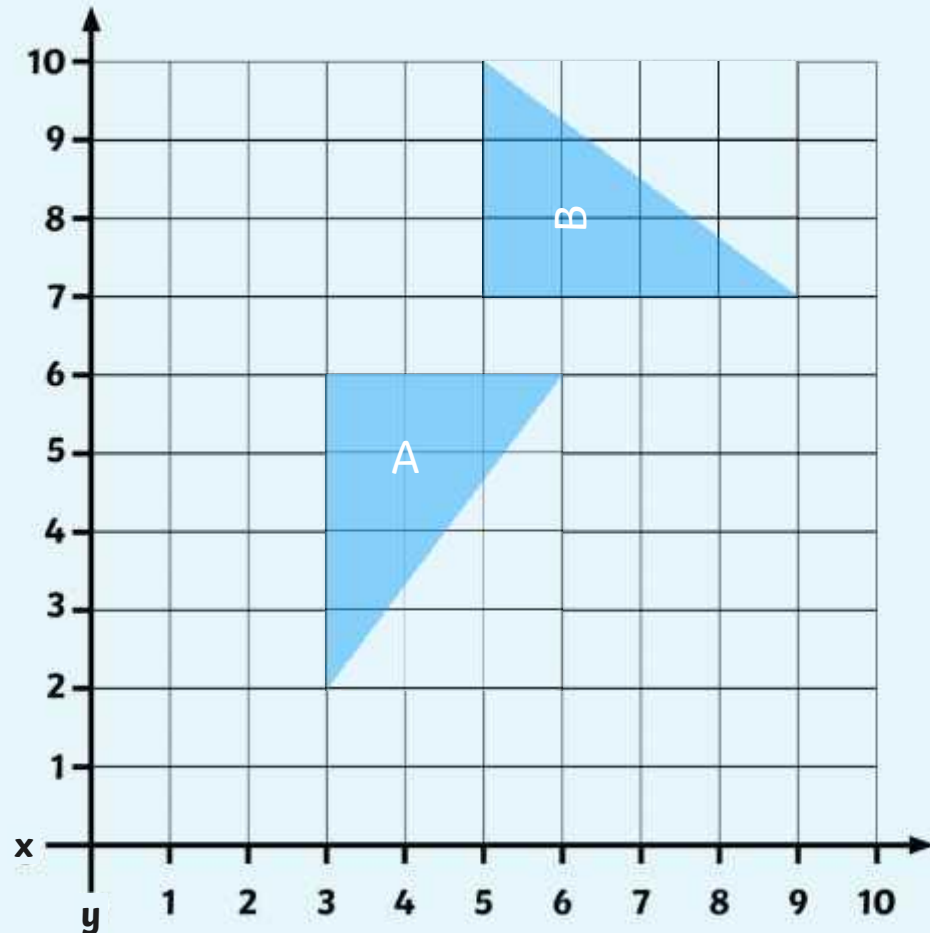
Translating Shapes

Is this a translation?

No



This is not a translation because the shape has been rotated.

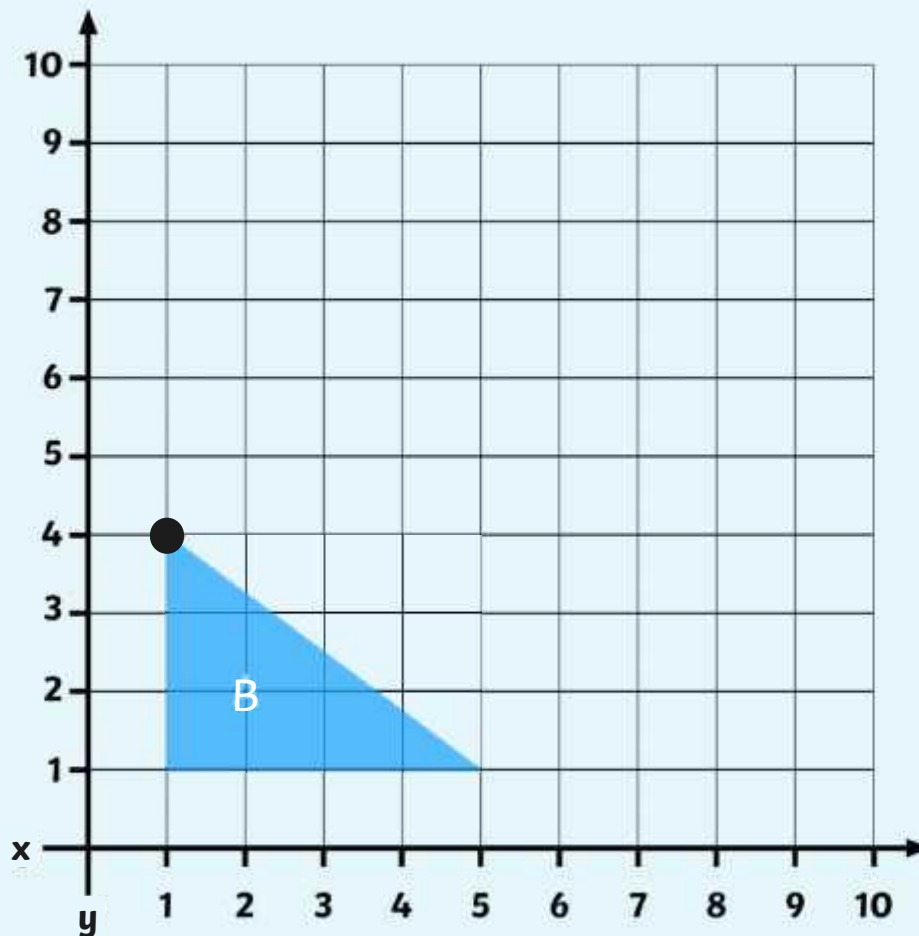


How Do We Describe a Translation?

To describe a translation, you have to say how many squares it has moved to the left or right, and how many squares it has moved up or down.

The shape has been translated **4 squares to the right**. Then **3 squares up**.

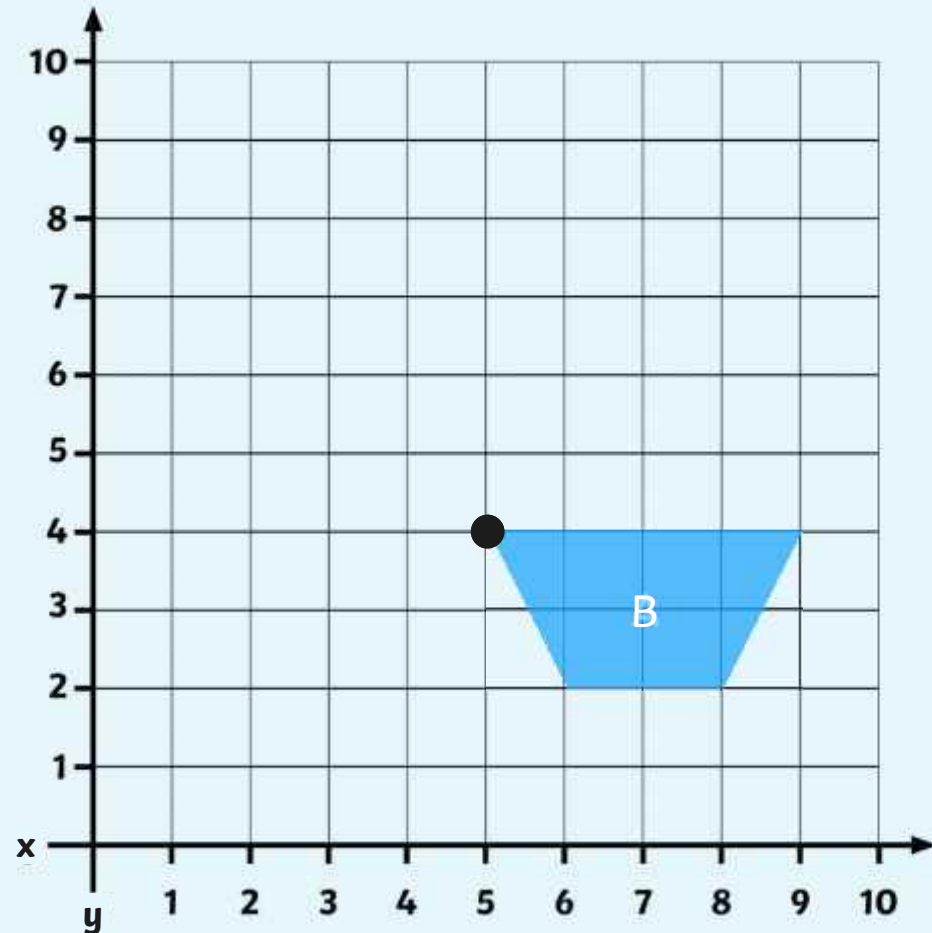
The coordinates of the black point on shape A are (1,4). What are the coordinates of the point shown on shape B?
(5,7)



How Do We Describe a Translation?

The shape has been translated **4 squares to the left.**
Then **5 squares up.**

The coordinates of the black point on shape A are $(5,4)$.
What are the coordinates of the point shown on shape B?
 $(1,9)$

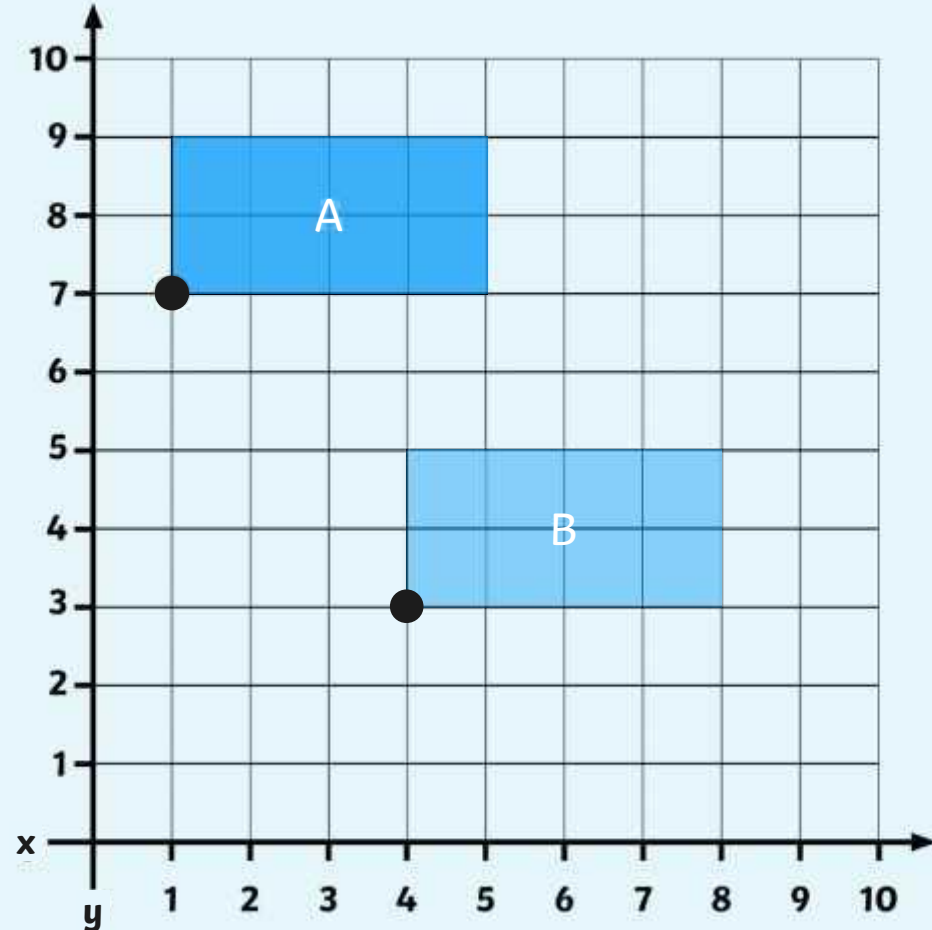


How Has This Shape Been Translated From A to B?

This shape has been translated **3 squares to the right** and **4 squares down**.

Can you work out the coordinates of the black point on shape A and shape B?
(1,7) (4,3)

Can you work out all the coordinates of shape B?
(4,3) (8,3) (8,5) (4,5)

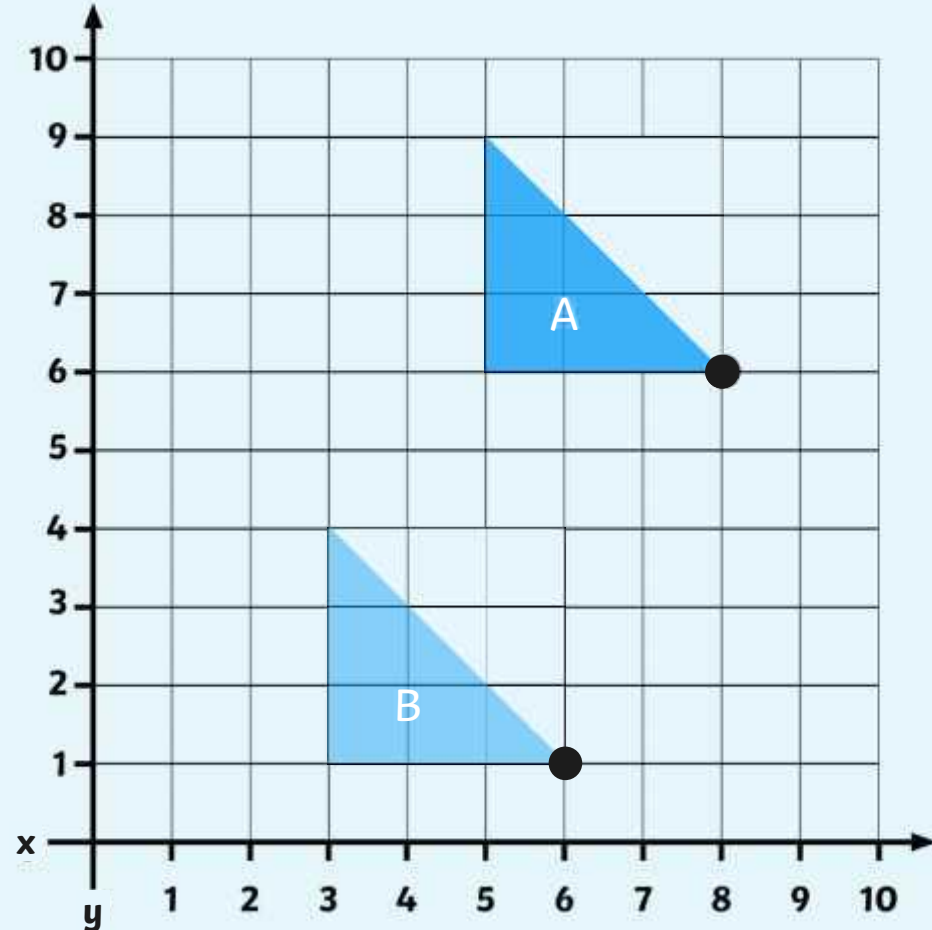


How Has This Shape Been Translated From A to B?

This shape has been translated **2 squares to the left** and **5 squares down**.

Can you work out the coordinates of the black point on shape A and shape B?
(8,6) (6,1)

Can you work out all the coordinates of shape B?
(6,1) (3,1) (3,4)



How Has This Shape Been Translated From A to B?

This shape has been translated **3 squares to the left** and **3 squares up**.

Can you work out the coordinates of the black point on shape A and shape B?
(5,5) (2,8)

Can you work out all the coordinates of shape B?
(2,8) (4,8) (3,5) (1,5)

