

Year 6 – Autumn Block 4 – Position and Direction – Translations

About This Resource:

This PowerPoint has been designed to support your teaching of this small step. It includes a starter activity and an example of each question from the Varied Fluency and Reasoning and Problem Solving resources also provided in this pack. You can choose to work through all examples provided or a selection of them depending on the needs of your class.

National Curriculum Objectives:

Mathematics Year 6: (6P2) [Draw and translate simple shapes on the coordinate plane, and reflect them in the axes](#)

Mathematics Year 6: (6P3) [Describe positions on the full coordinate grid \(all four quadrants\)](#)

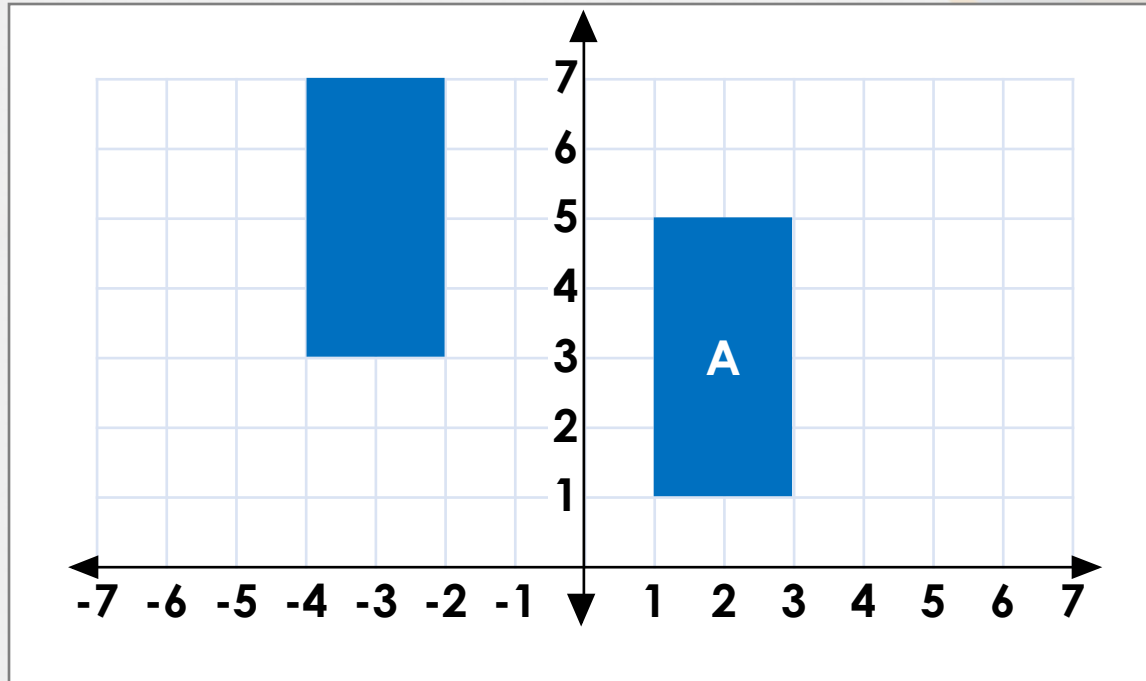
More [Year 6 Position and Direction](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Step 3: Translations

Introduction

Choose the correct statement to describe the translation of shape A.



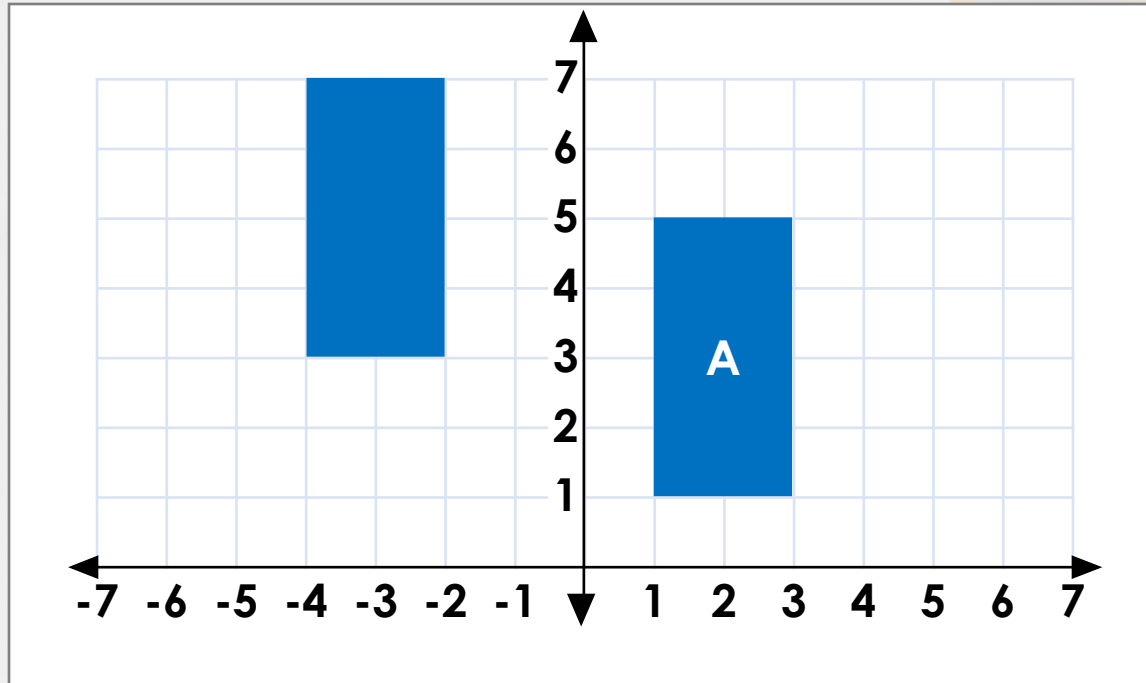
4 squares left and 2 squares up

5 squares left and 2 squares up

5 squares left and 3 squares up

Introduction

Choose the correct statement to describe the translation of shape A.



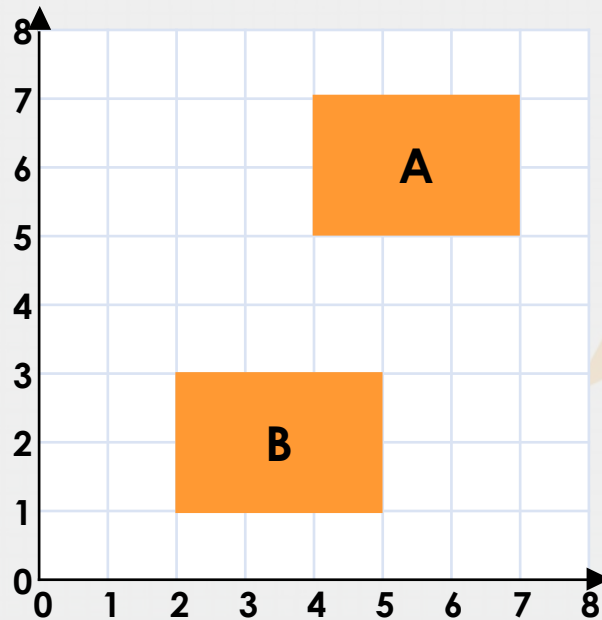
4 squares left and 2 squares up

5 squares left and 2 squares up

5 squares left and 3 squares up

Varied Fluency 1

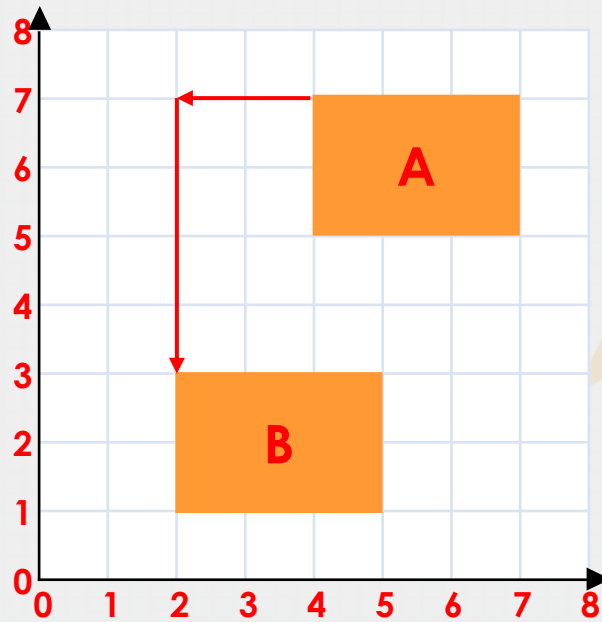
A shape is translated from position A to position B.
Complete the sentence:



The shape has moved squares to
the left and squares down.

Varied Fluency 1

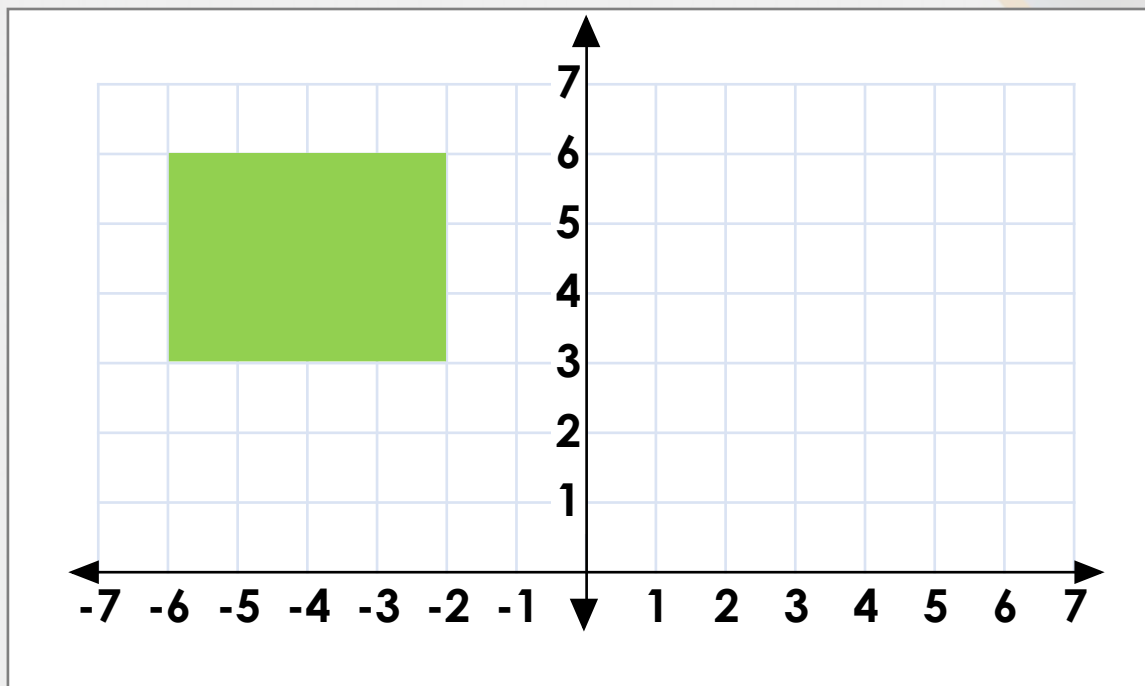
A shape is translated from position A to position B.
Complete the sentence:



The shape has moved squares to
the left and squares down.

Varied Fluency 2

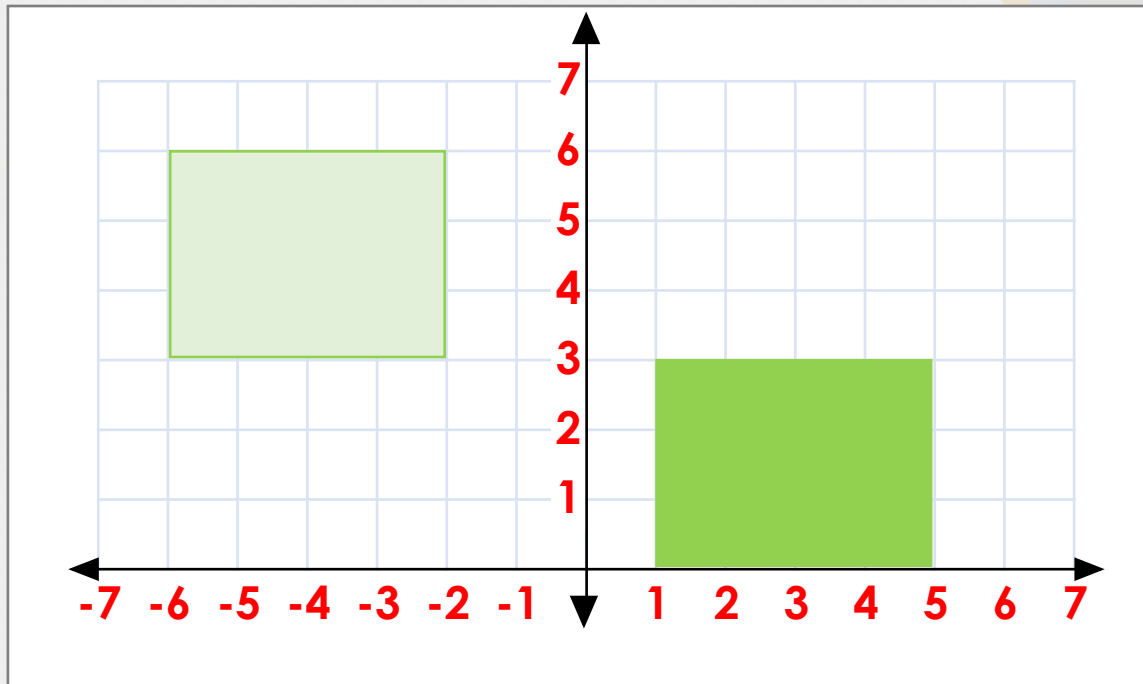
Translate this shape 7 squares to the right and 3 squares down.



What are its new coordinates?

Varied Fluency 2

Translate this shape 7 squares to the right and 3 squares down.

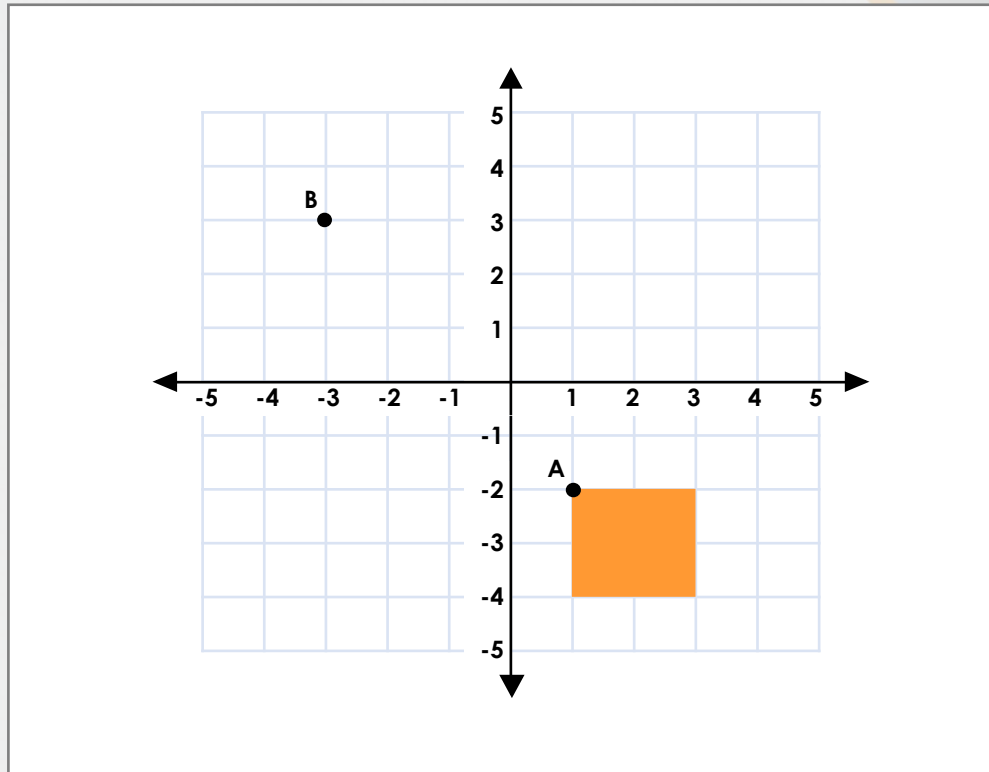


What are its new coordinates?

(1, 3), (5, 3), (5, 0), (1, 0)

Varied Fluency 3

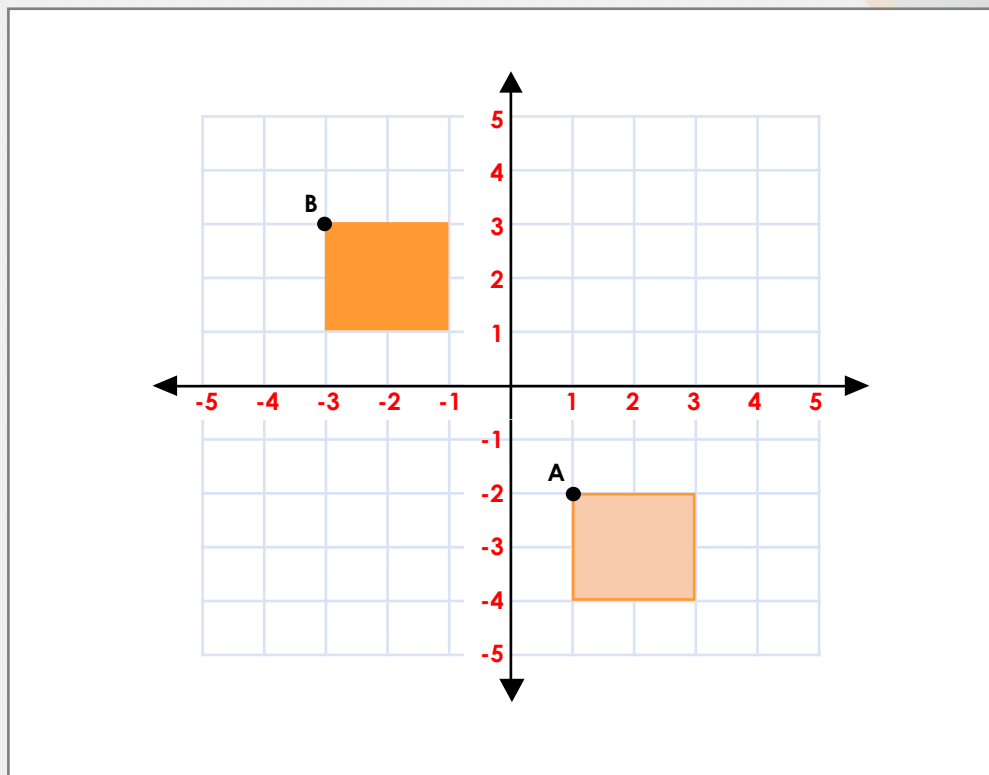
This shape is translated so that point A moves to point B.



Draw the shape in its new position and write down the coordinates.

Varied Fluency 3

This shape is translated so that point A moves to point B.

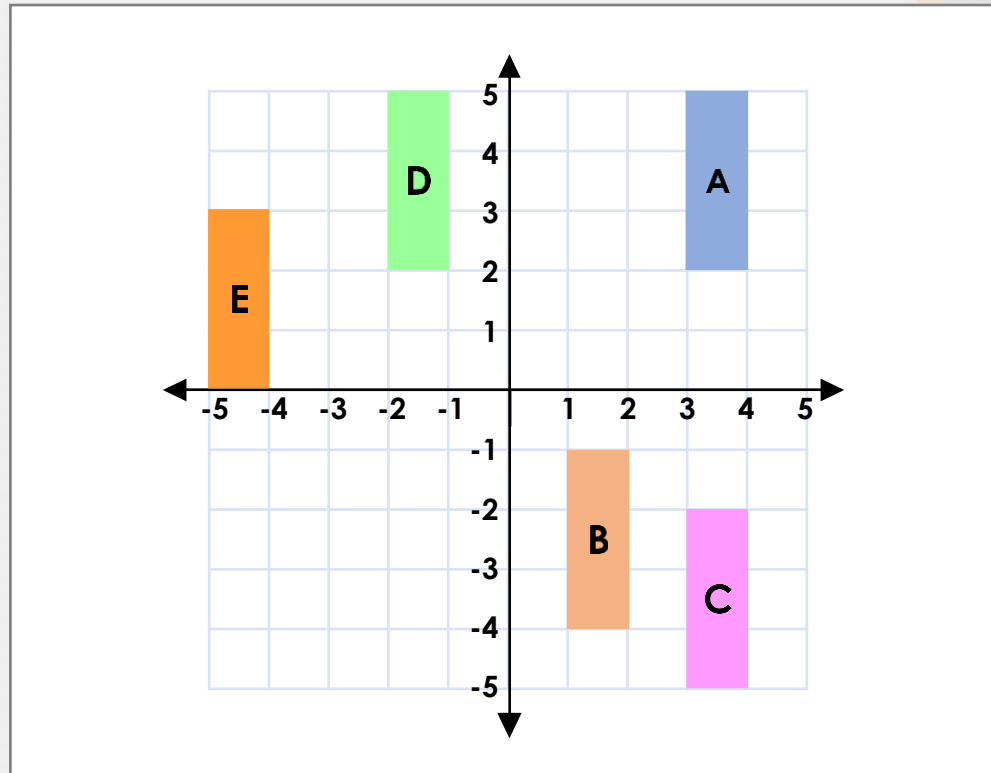


Draw the shape in its new position and write down the coordinates.

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

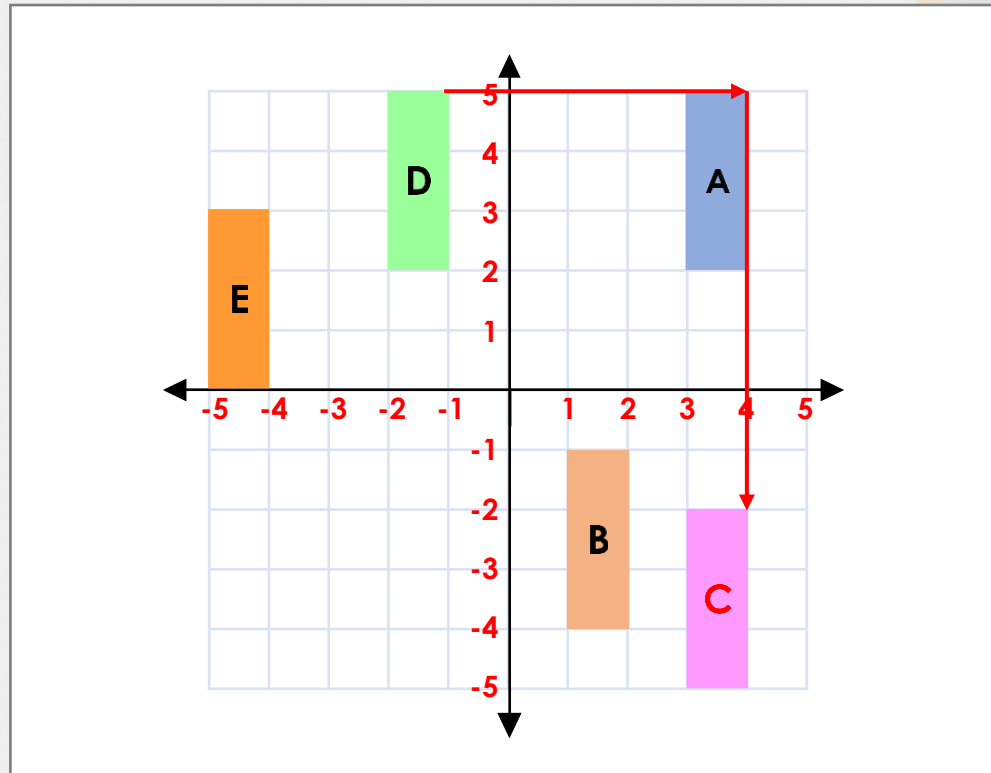
Problem Solving 1

Which shape has been translated 5 squares to the right and 7 squares down?



Problem Solving 1

Which shape has been translated 5 squares to the right and 7 squares down?

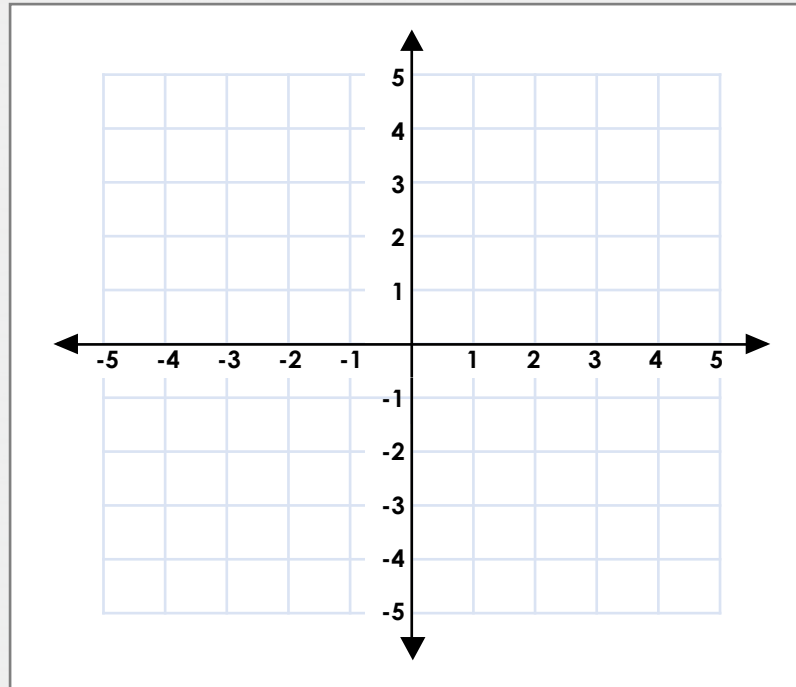


Problem Solving 2

Here are the coordinates of a rectangle:

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

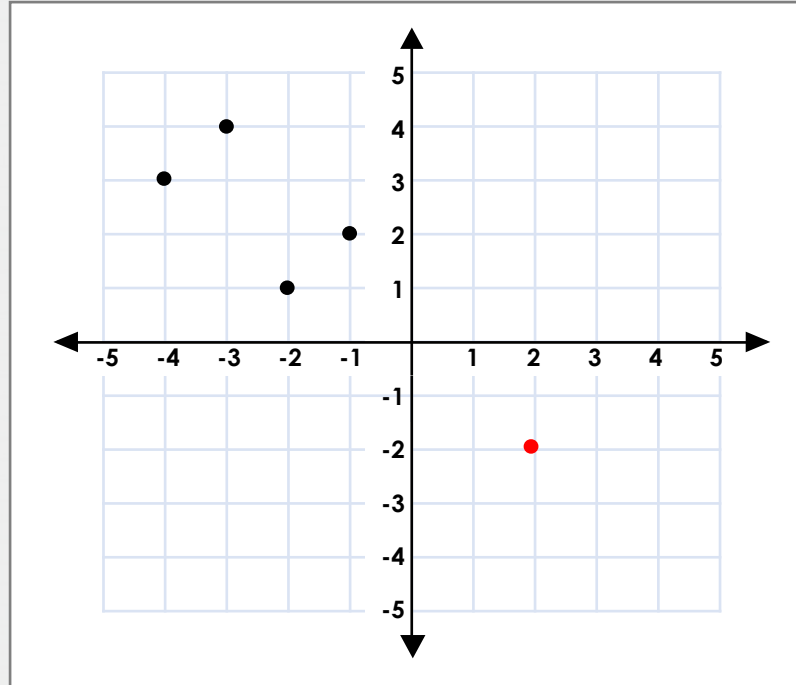
The first coordinate translates to $(2, -2)$.



What are the other coordinates?

Problem Solving 2

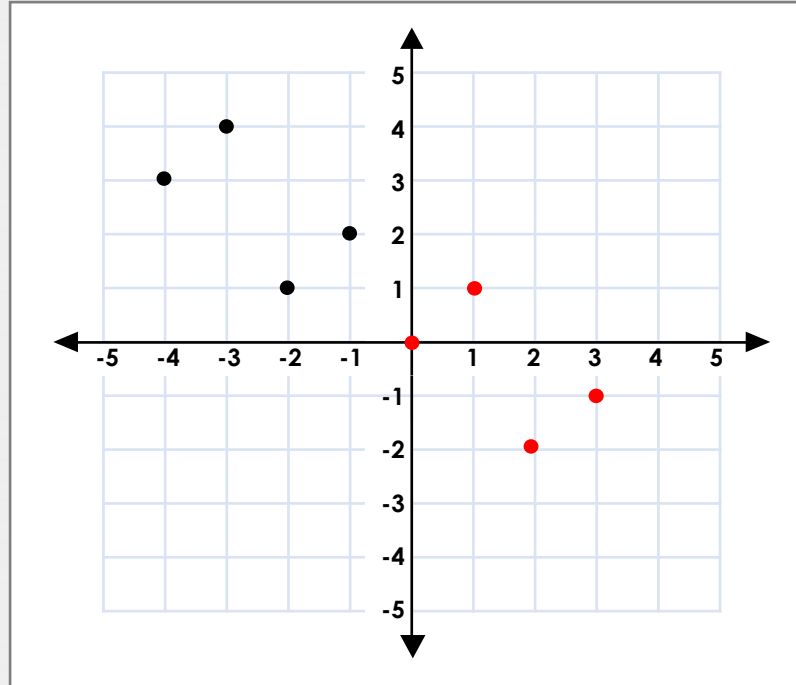
Here are the coordinates of a rectangle:
 $(-2, 1)$, $(-1, 2)$, $(-3, 4)$, $(-4, 3)$.
The first coordinate translates to $(2, -2)$.



What are the other coordinates?

Problem Solving 2

Here are the coordinates of a rectangle:
 $(-2, 1)$, $(-1, 2)$, $(-3, 4)$, $(-4, 3)$.
The first coordinate translates to $(2, -2)$.

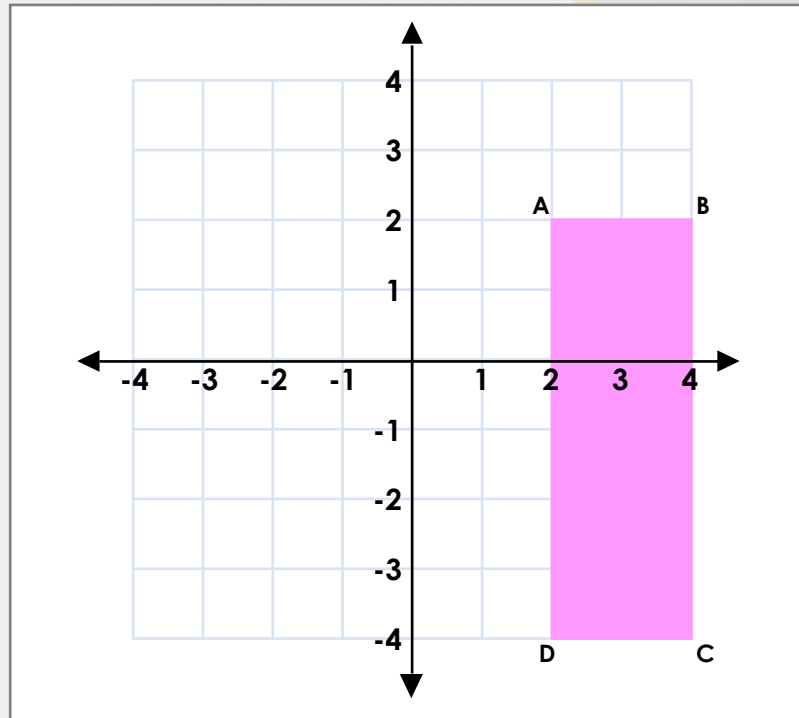


What are the other coordinates?
 $(3, -1)$, $(1, 1)$, $(0, 0)$

Reasoning 1

Eric draws shape ABCD on the grid. He wants to translate the shape so that point D becomes the coordinate $(-3, -2)$. He says,

Point B will become the coordinate $(1, 4)$.

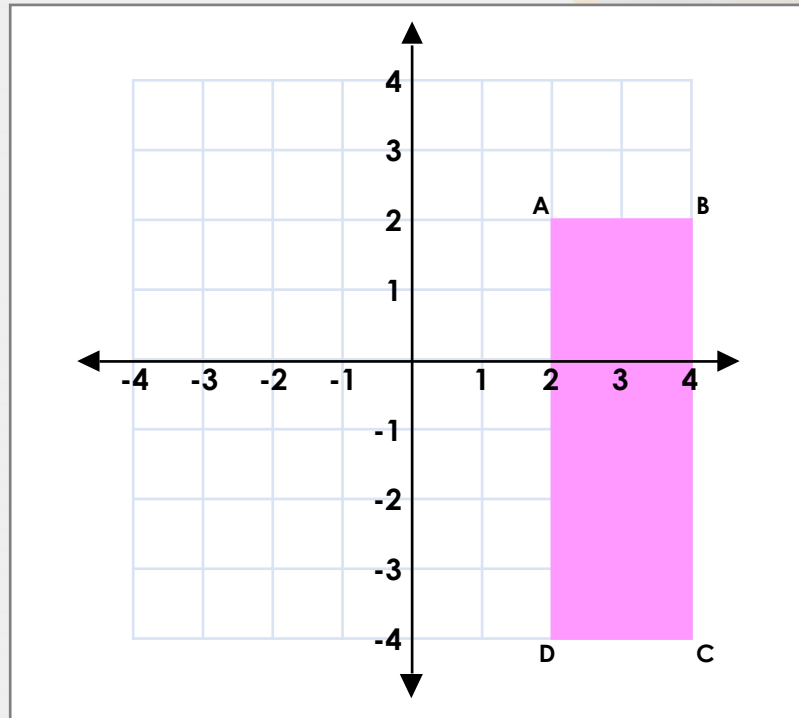


Do you agree? Explain why.

Reasoning 1

Eric draws shape ABCD on the grid. He wants to translate the shape so that point D becomes the coordinate $(-3, -2)$. He says,

Point B will become the coordinate $(1, 4)$.



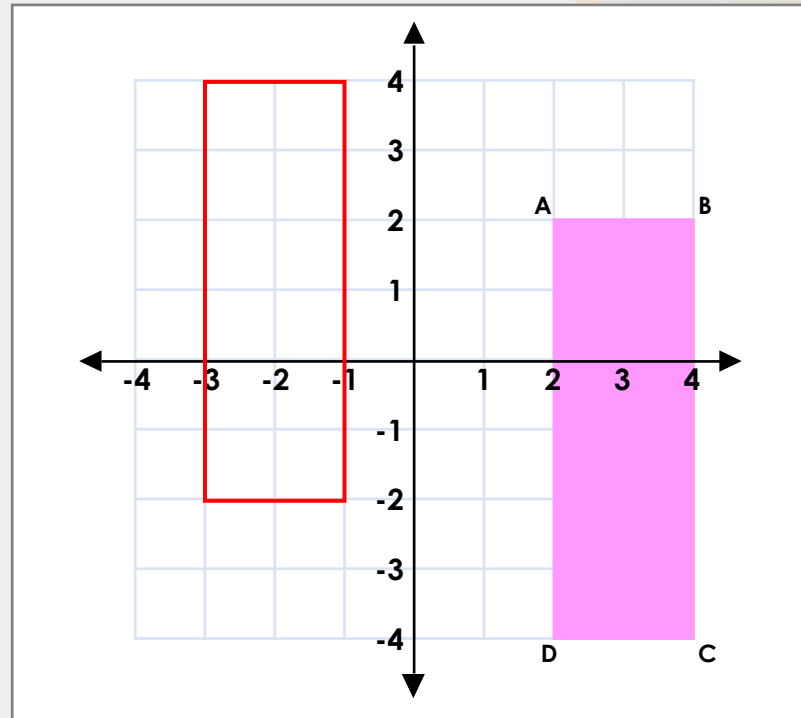
Do you agree? Explain why.

No, he is incorrect because...

Reasoning 1

Eric draws shape ABCD on the grid. He wants to translate the shape so that point D becomes the coordinate $(-3, -2)$. He says,

Point B will become the coordinate $(1, 4)$.



Do you agree? Explain why.

No, he is incorrect. Point B will translate to $(-1, 4)$. He forgot to include the negative sign.