

POSITION AND DIRECTION- DAY 3

To be able to move shapes and coordinates
in the first quadrant

SUCCESS CRITERIA

- ✓ I can move coordinates when both the x and y coordinates have a positive value, also moving shapes using given coordinates and directions
- ✓ I can explain my reasoning when moving coordinates when both the x and y coordinates have a positive value, also moving shapes using given coordinates and directions

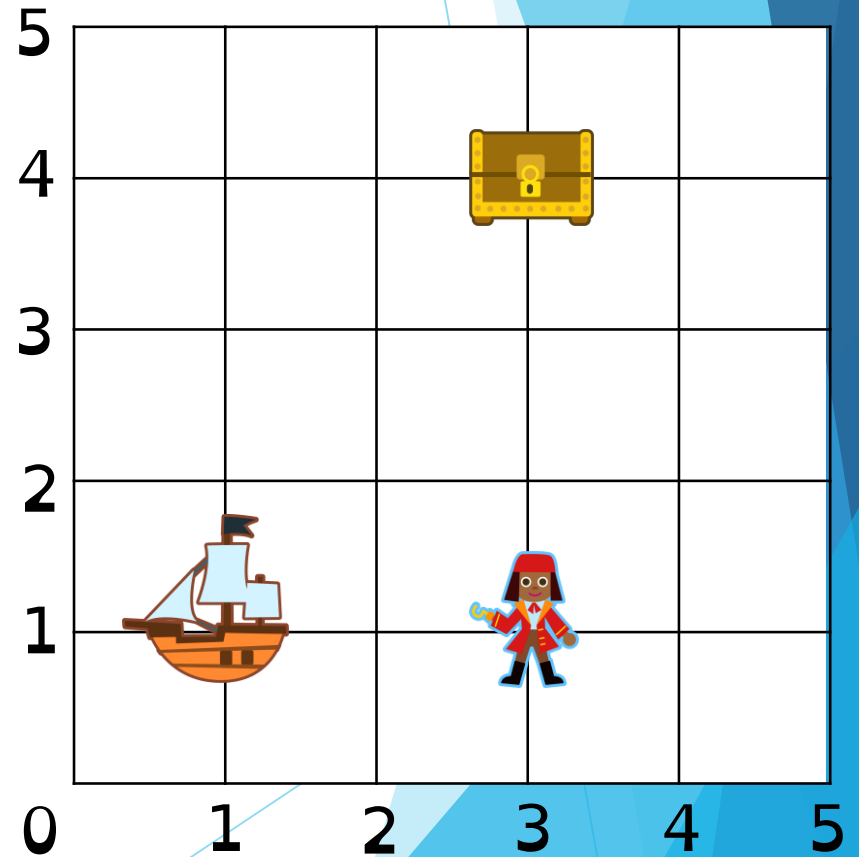
To be able to move shapes and coordinates in the first quadrant

Starter:

James says, “The pirate has to move more steps to get back to her ship than to get to the treasure.”

Do you agree?

Explain your answer, by giving coordinates and directions.



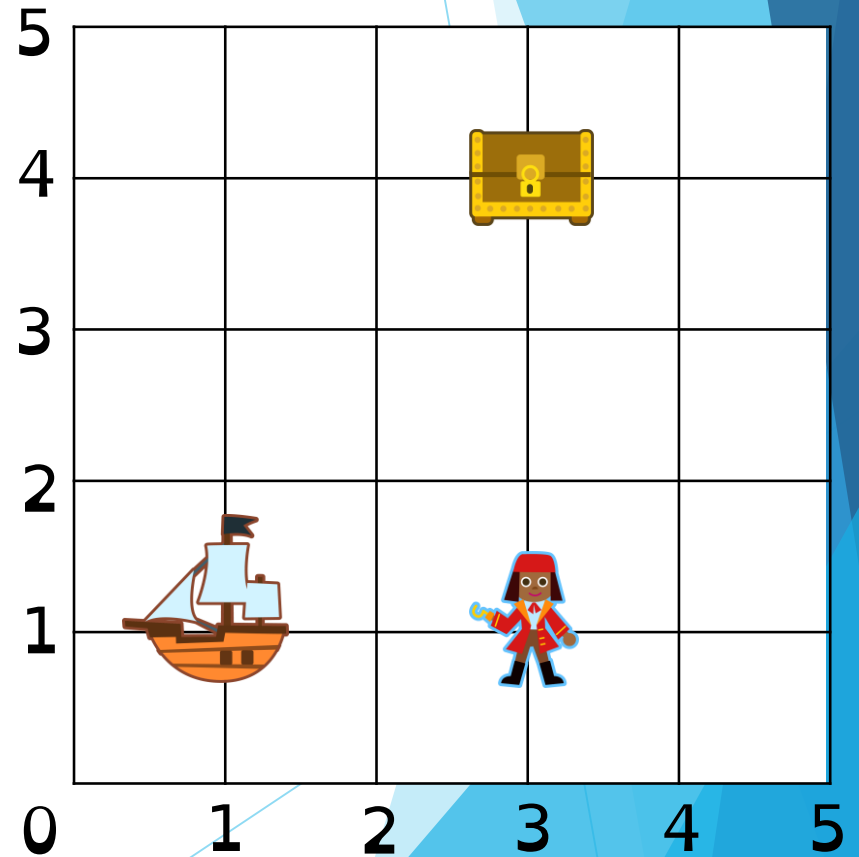
To be able to move shapes and coordinates in the first quadrant

Starter:

James says, “The pirate has to move more steps to get back to her ship than to get to the treasure.”

No, I do not agree.

The pirate is standing at (3,1), it is only two moves to the left to get back to the ship which is at (1,1), whereas it is three moves up to get to the treasure which is at (3,4).

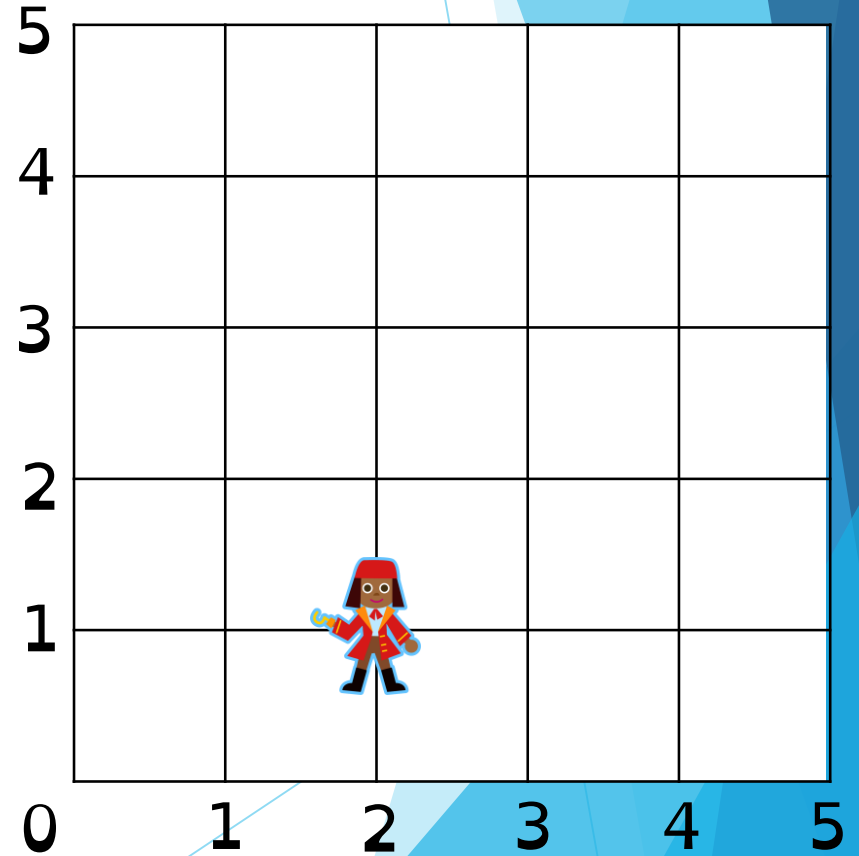


To be able to move shapes and coordinates in the first quadrant

Talking Time:

The pirate is at $(2,1)$, if her parrot is two spaces above her, where will her parrot be?

Plot and give the coordinate reading.

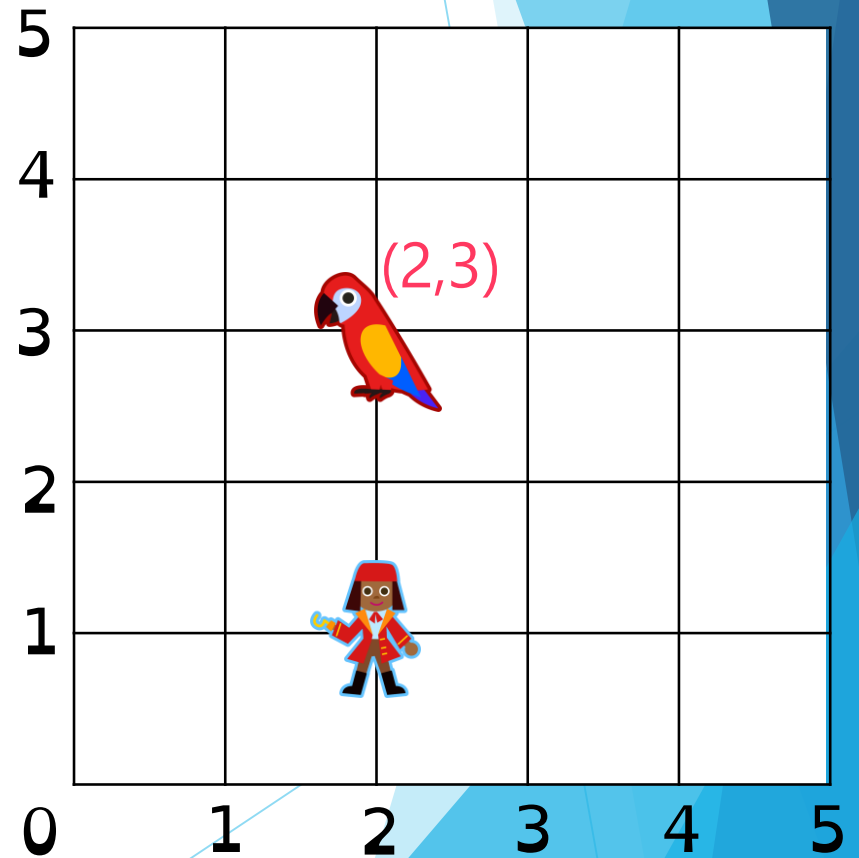


To be able to move shapes and coordinates in the first quadrant

Talking Time:

The pirate is at $(2,1)$, if her parrot is two spaces above her, where will her parrot be?

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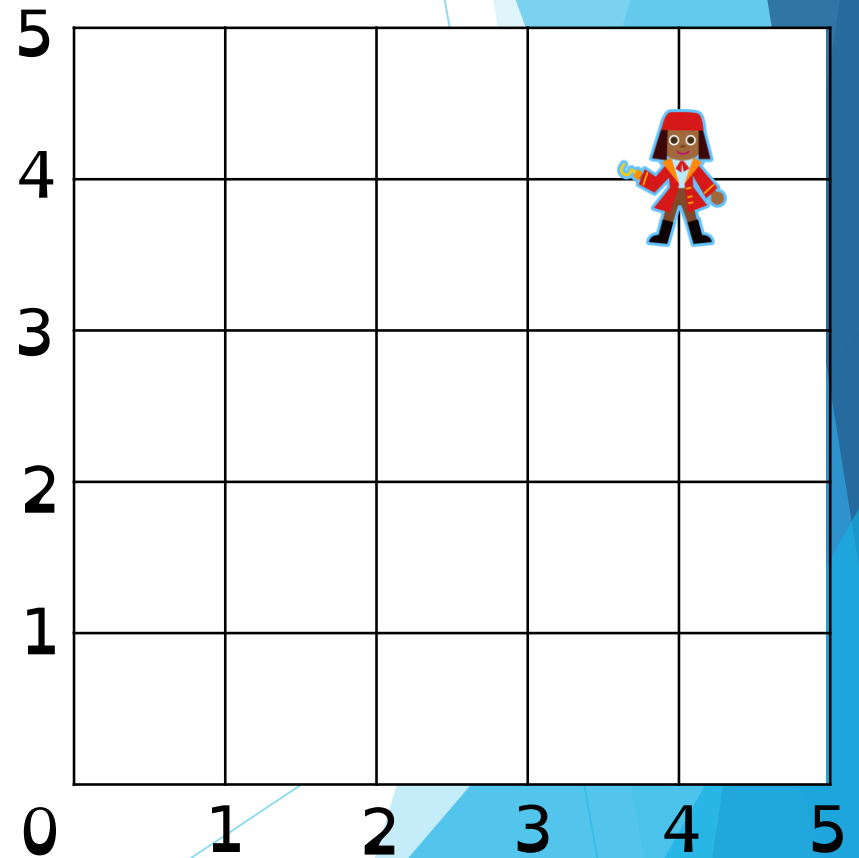


To be able to move shapes and coordinates
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Talking Time:

The pirate is at (4,4), if her ship is three spaces
below her, where will her ship be?

Plot and give the coordinate reading.

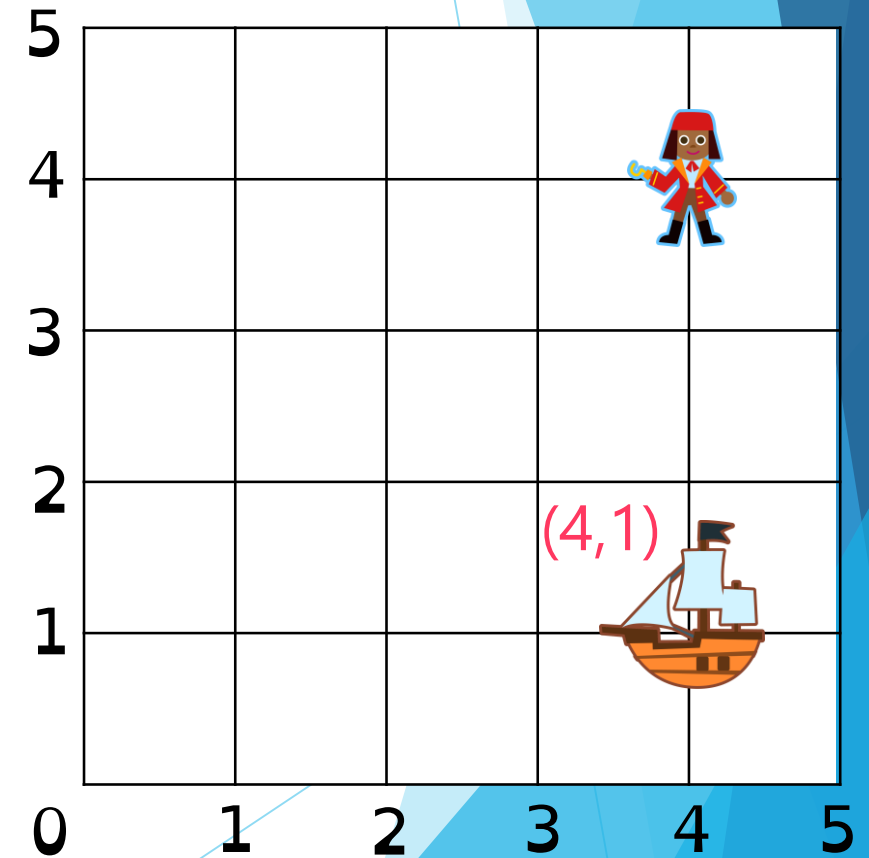


To be able to move shapes and coordinates in the first quadrant

Talking Time:

The pirate is at (4,4), if her ship is three spaces below her, where will her ship be?

Plot and give the coordinate reading.

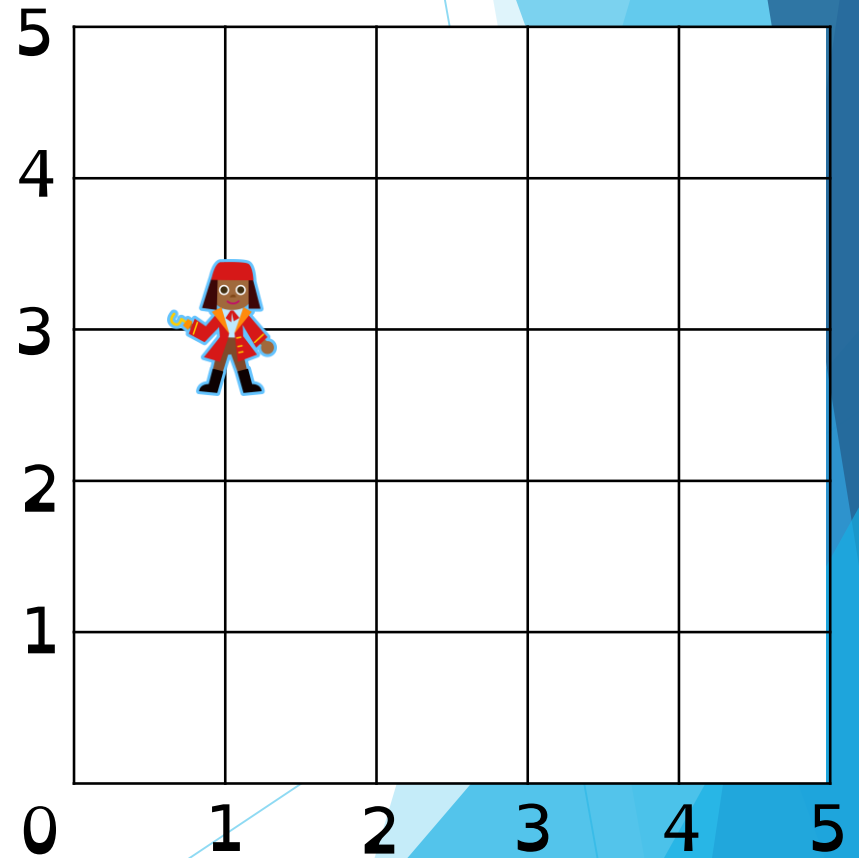


To be able to move shapes and coordinates in the first quadrant

Talking Time:

The pirate is at $(1,3)$, if a ring is four spaces to the right of her, where will the ring be?

Plot and give the coordinate reading.

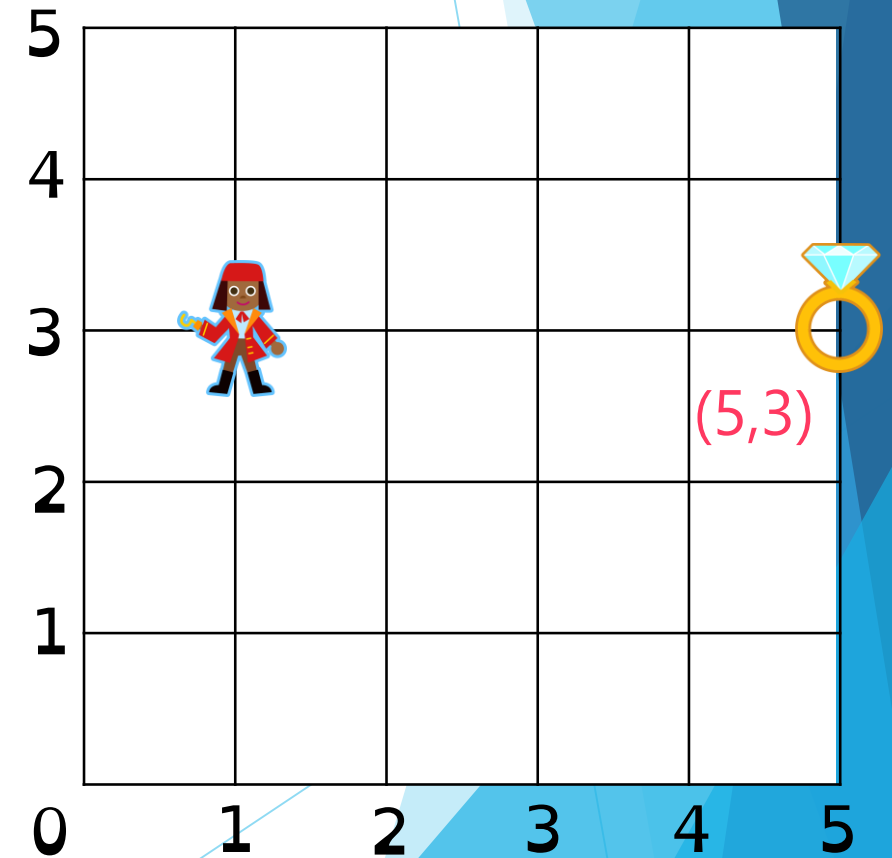


To be able to move shapes and coordinates in the first quadrant

Talking Time:

The pirate is at $(1,3)$, if a ring is four spaces to the right of her, where will the ring be?

Plot and give the coordinate reading.



To be able to move shapes and coordinates in the first quadrant

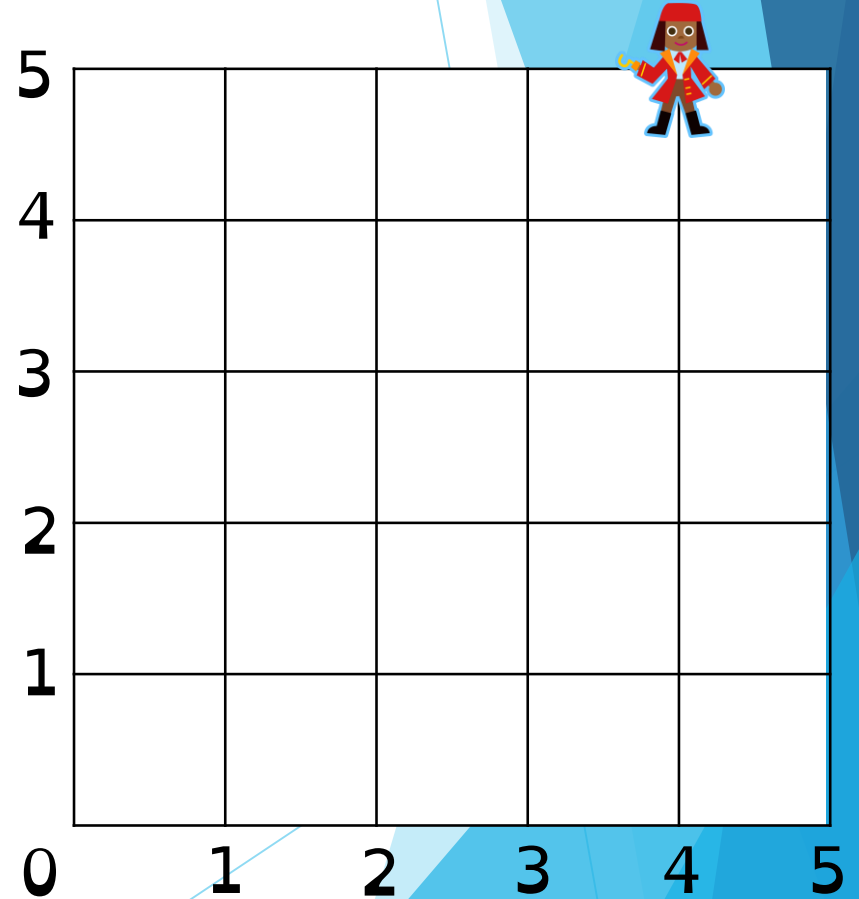
Activity 1:

The pirate is at (4,5).

If a lamp is three spaces to the left of her, where will the lamp be?

If an emerald is five spaces below her, where will the emerald be?

Plot and give the coordinates readings.



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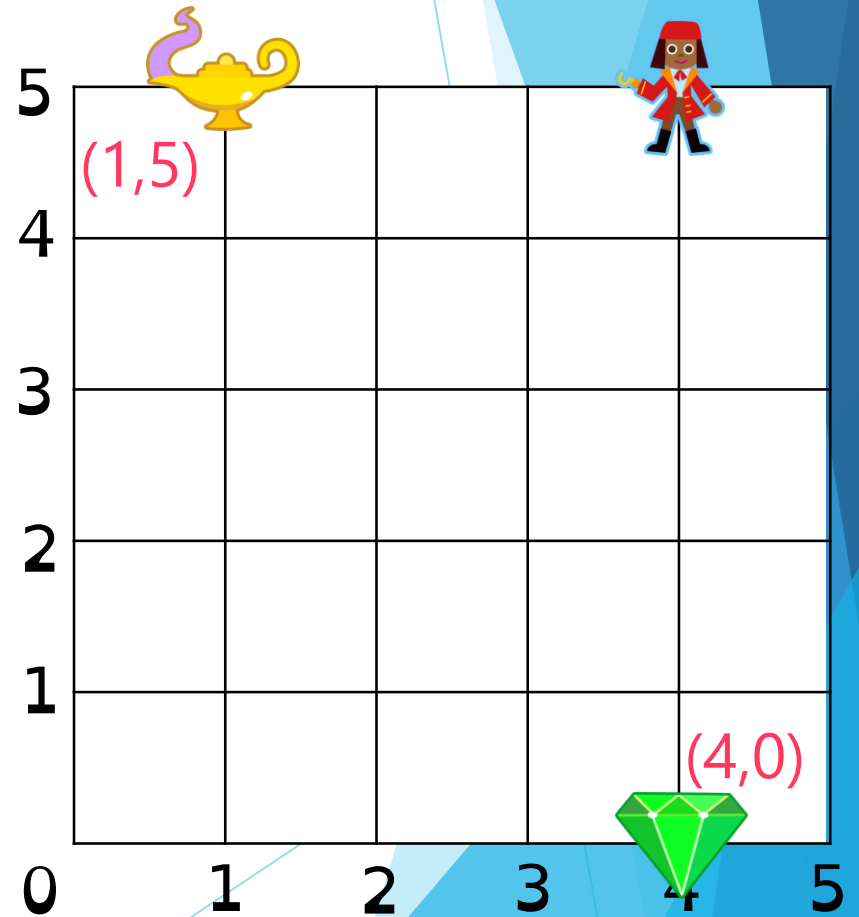
Activity 1:

The pirate is at (4,5).

If a lamp is three spaces to the left of her, where will the lamp be?

If an emerald is five spaces below her, where will the emerald be?

Plot and give the coordinates readings.



To be able to move shapes and coordinates in the first quadrant

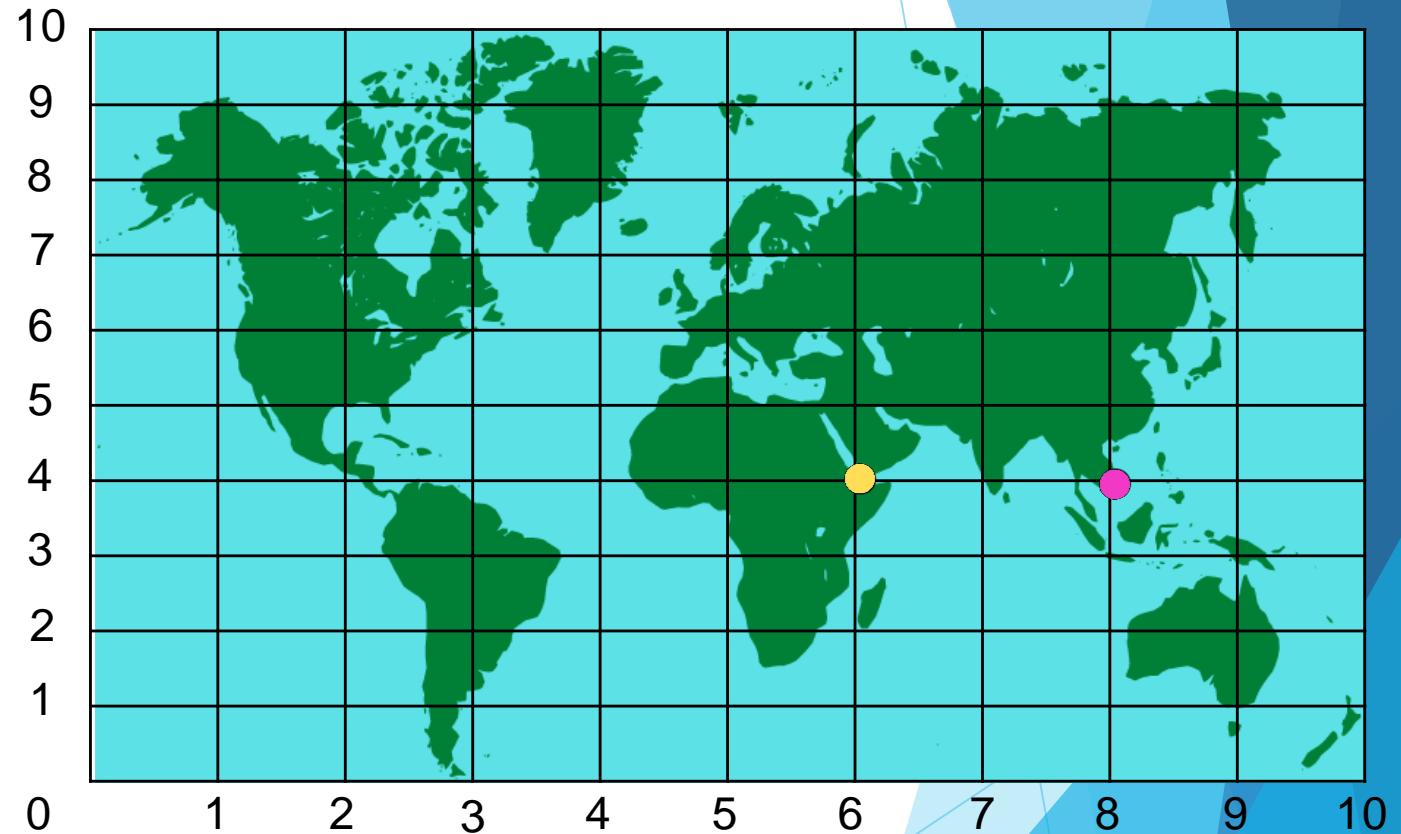
Talking Time:

A boat sets sail from Vietnam, then travels two spaces left.

Complete the sentences below.

The boat's starting point is at (__,__).

The boat's journey ends at (__,__).



To be able to move shapes and coordinates in the first quadrant

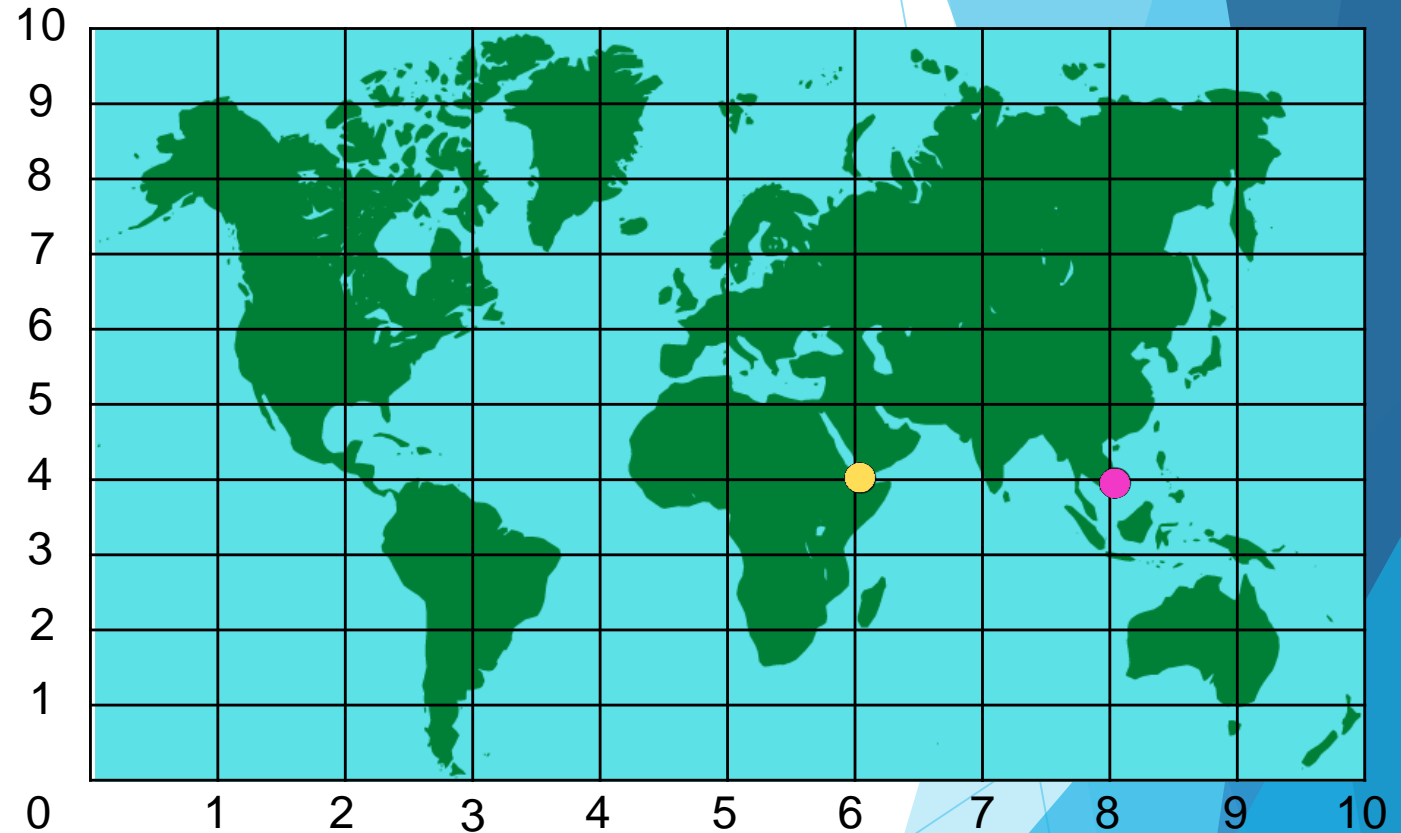
Talking Time:

A boat sets sail from Vietnam, then travels two spaces left.

Complete the sentences below.

The boat's starting point is at (8,4).

The boat's journey ends at (6,4).



To be able to move shapes and coordinates in the first quadrant

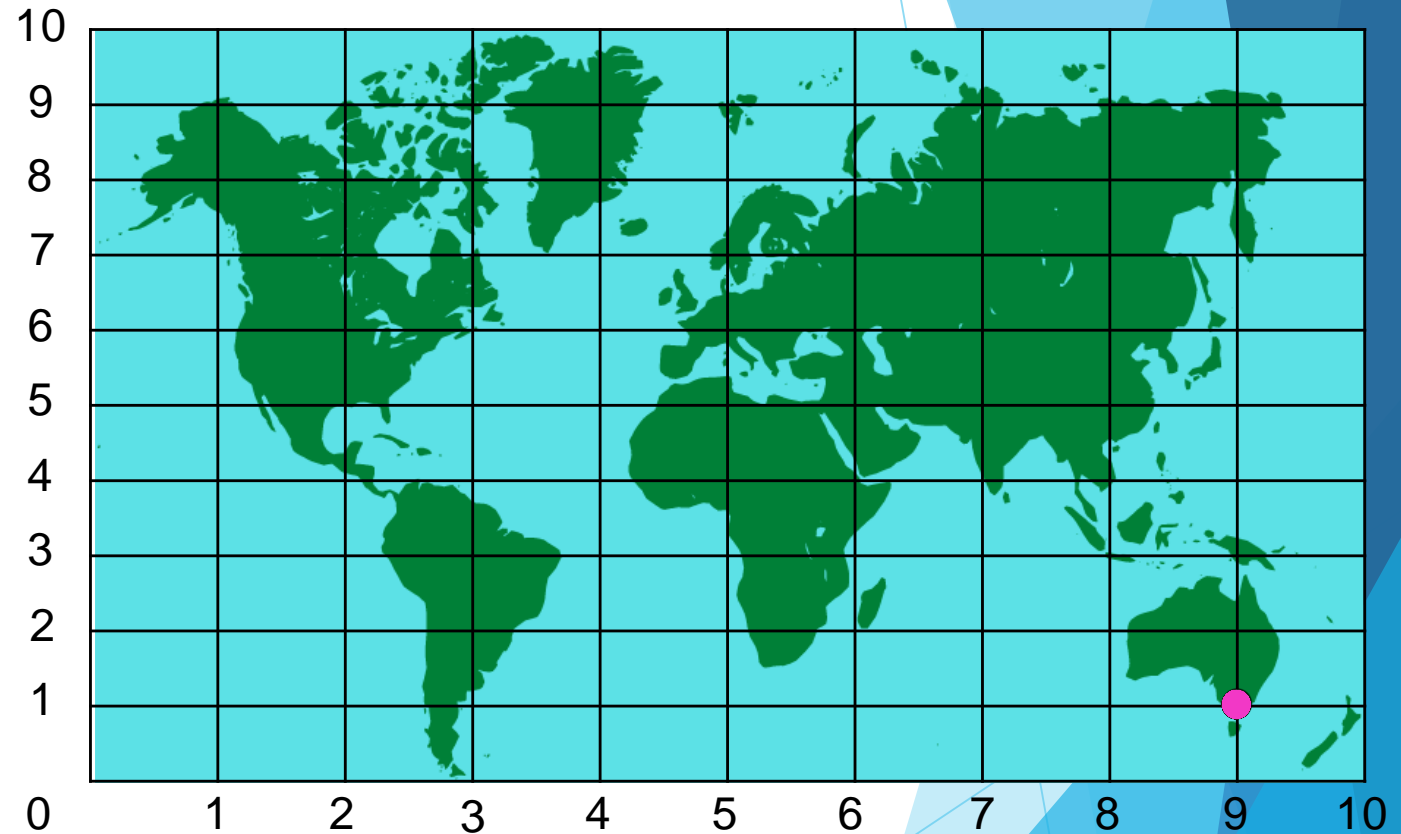
Talking Time:

A boat sets sail from Australia, then travels two spaces left and three spaces up.

Complete the sentences below.

The boat's starting point is at (__,__).

The boat's journey ends at (__,__).



To be able to move shapes and coordinates in the first quadrant

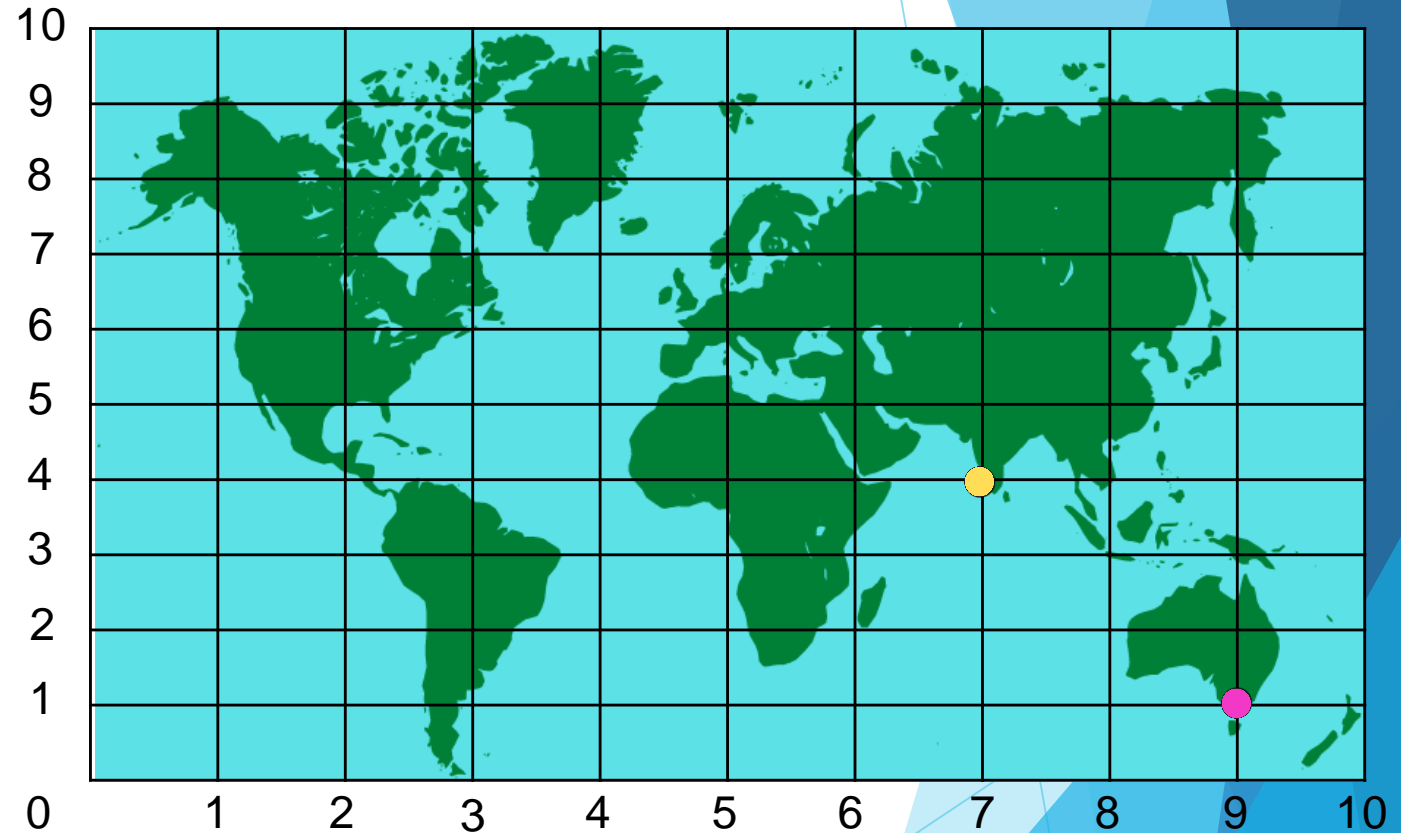
Talking Time:

A boat sets sail from Australia, then travels two spaces left and three spaces up.

Complete the sentences below.

The boat's starting point is at (9,1).

The boat's journey ends at (7,4).



To be able to move shapes and coordinates in the first quadrant

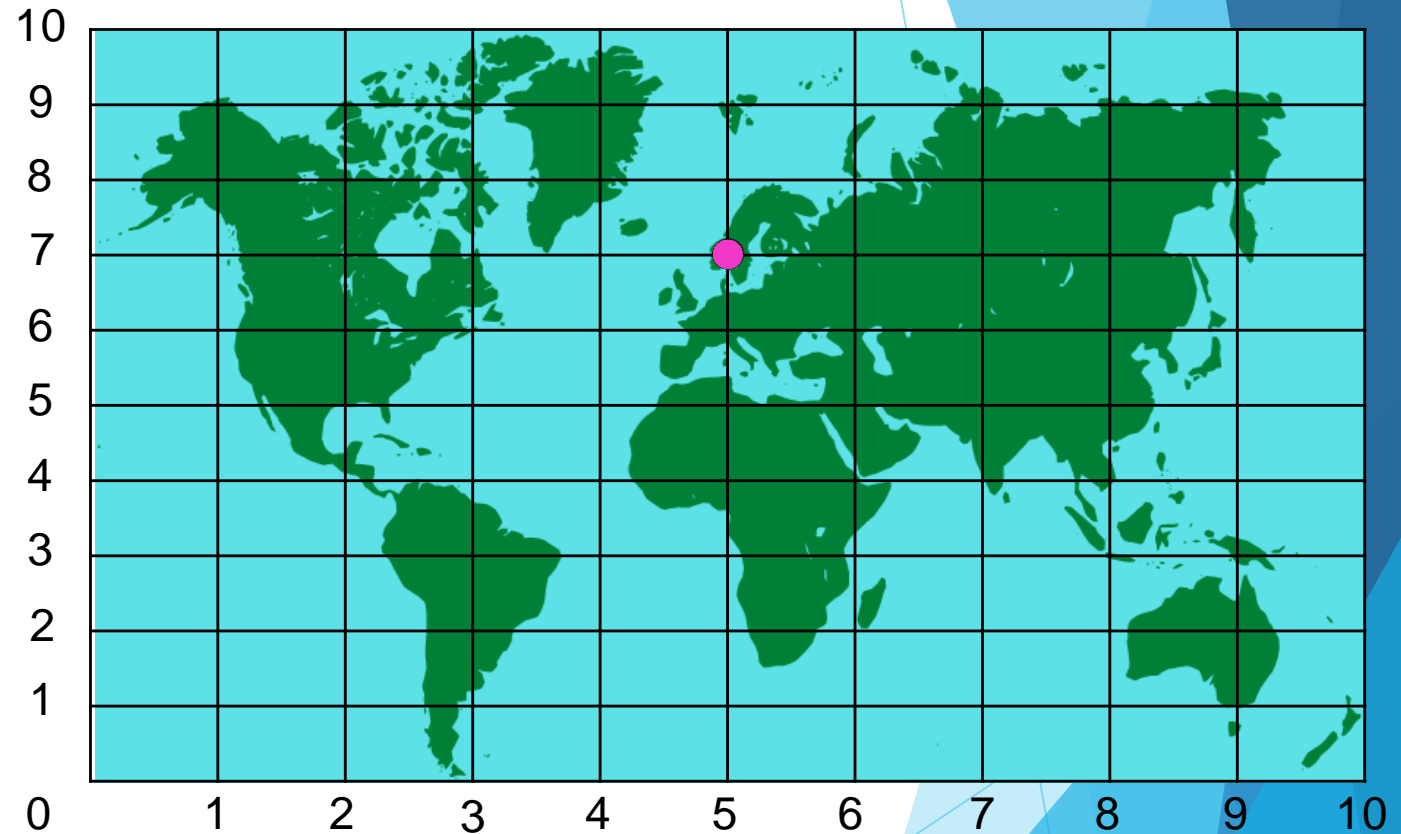
Activity 2:

A bird leaves Sweden and flies four spaces down and two spaces left before Winter.

Complete the sentences below.

The bird's starting point is at (__,__).

The bird's journey ends at (__,__).



What if the bird flew three spaces down and one space right?

To be able to move shapes and coordinates in the first quadrant

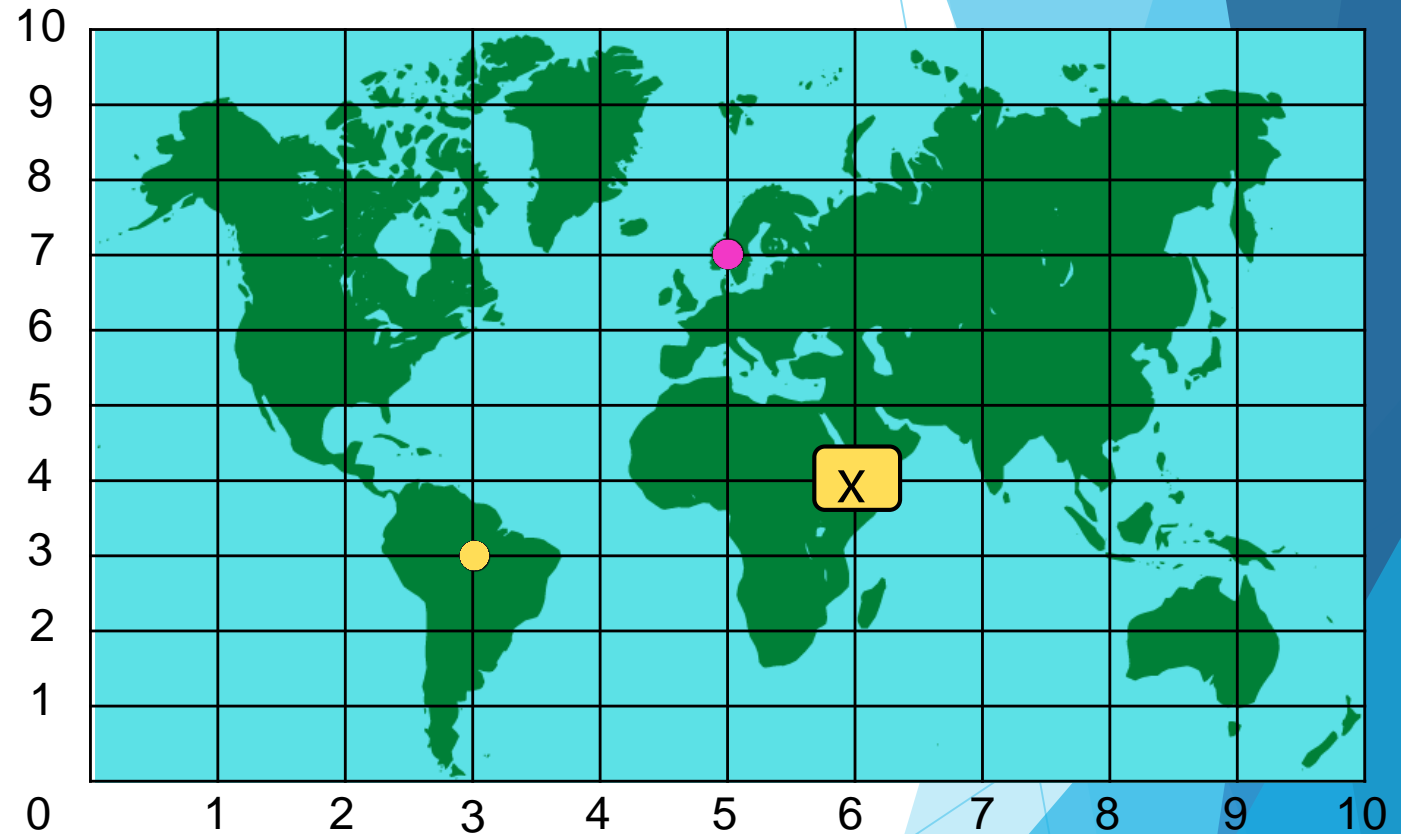
Activity 2:

A bird leaves Sweden and flies four spaces down and two spaces left before Winter.

Complete the sentences below.

The bird's starting point is at (5,7).

The bird's journey ends at (3,3).



The bird would have finished their journey at (6,4).

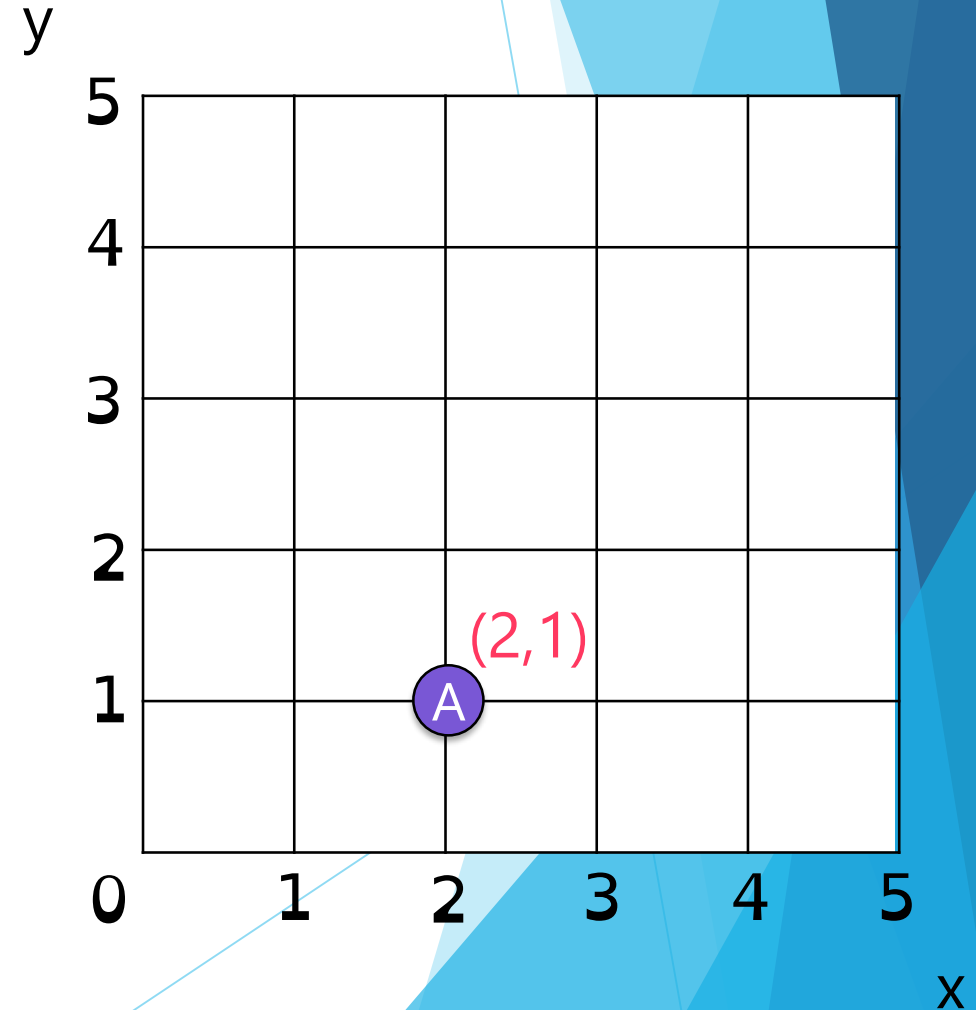
To be able to move shapes and coordinates in the first quadrant

Talking Time:

Give Point A's coordinates on the grid shown.

Then, do the following.

- ▶ Translate Point A one space left and one space up.
- ▶ Translate Point A two spaces right. Label this new coordinate Point B.
- ▶ Translate Point A two spaces up. Label this new coordinate Point C.
- ▶ Join Points A, B and C together.



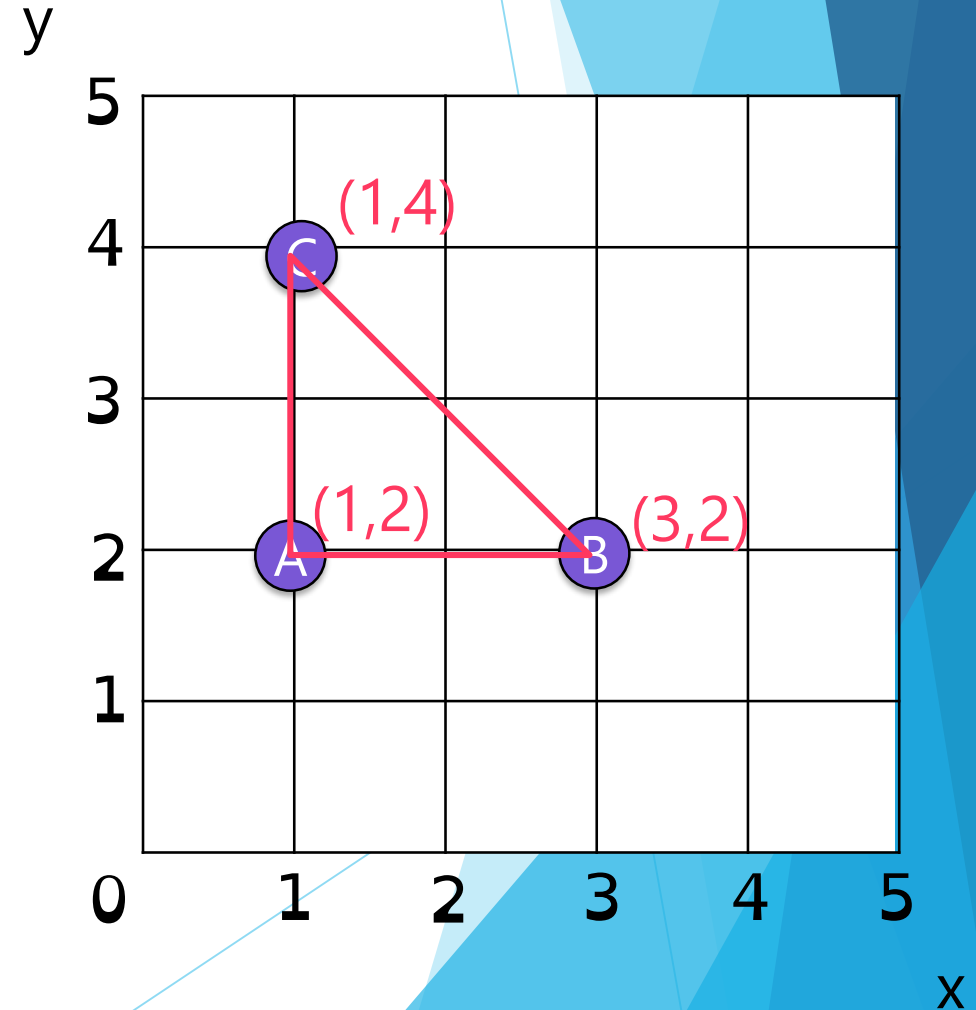
To be able to move shapes and coordinates in the first quadrant

Talking Time:

Give Point A's coordinates on the grid shown.

Then, do the following.

- ▶ Translate Point A one space left and one space up.
- ▶ Translate Point A two spaces right. Label this new coordinate Point B.
- ▶ Translate Point A two spaces up. Label this new coordinate Point C.
- ▶ Join Points A, B and C together.



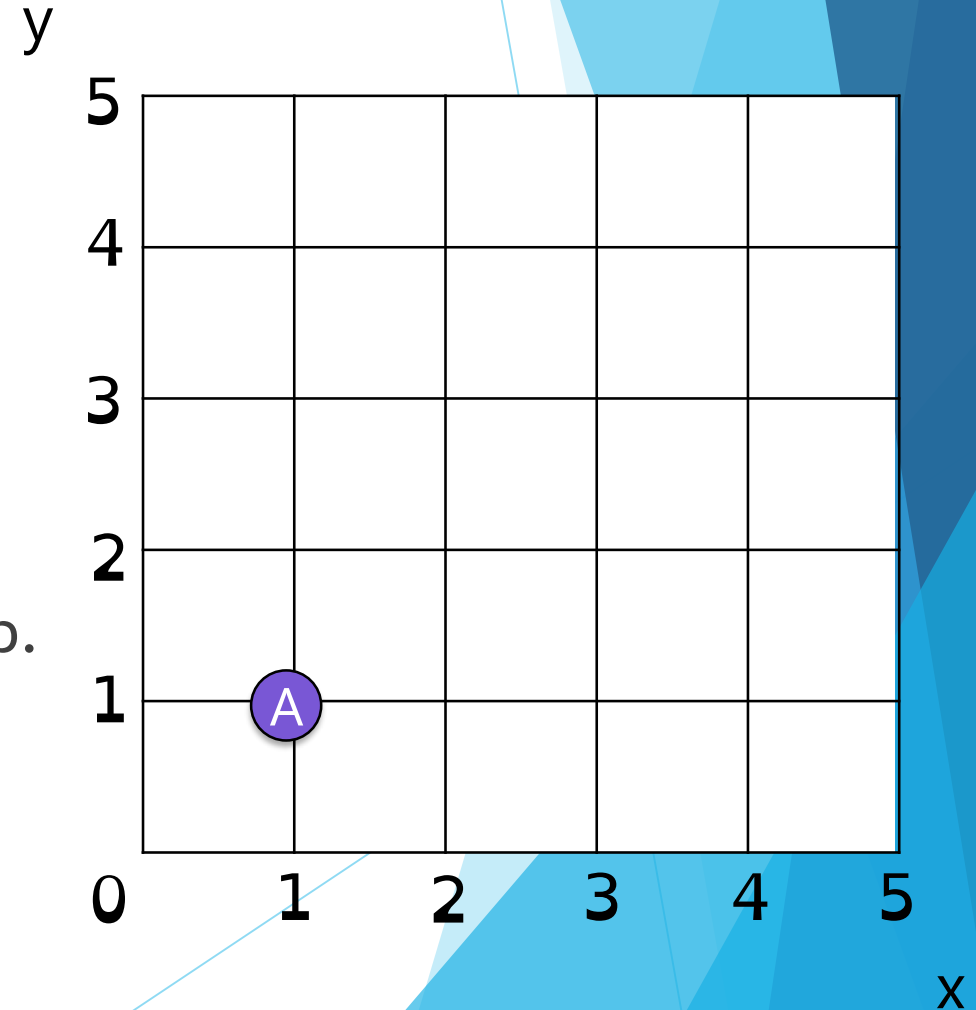
To be able to move shapes and coordinates in the first quadrant

Talking Time:

Give Point A's coordinates on the grid shown.

Then, do the following.

- ▶ Translate Point A three spaces right.
Label this new coordinate Point B.
- ▶ Translate Point A three spaces up.
Label this new coordinate Point C.
- ▶ Translate Point A three spaces right and three up.
Label this new coordinate Point D.
- ▶ Join Points A, B, C and D together.



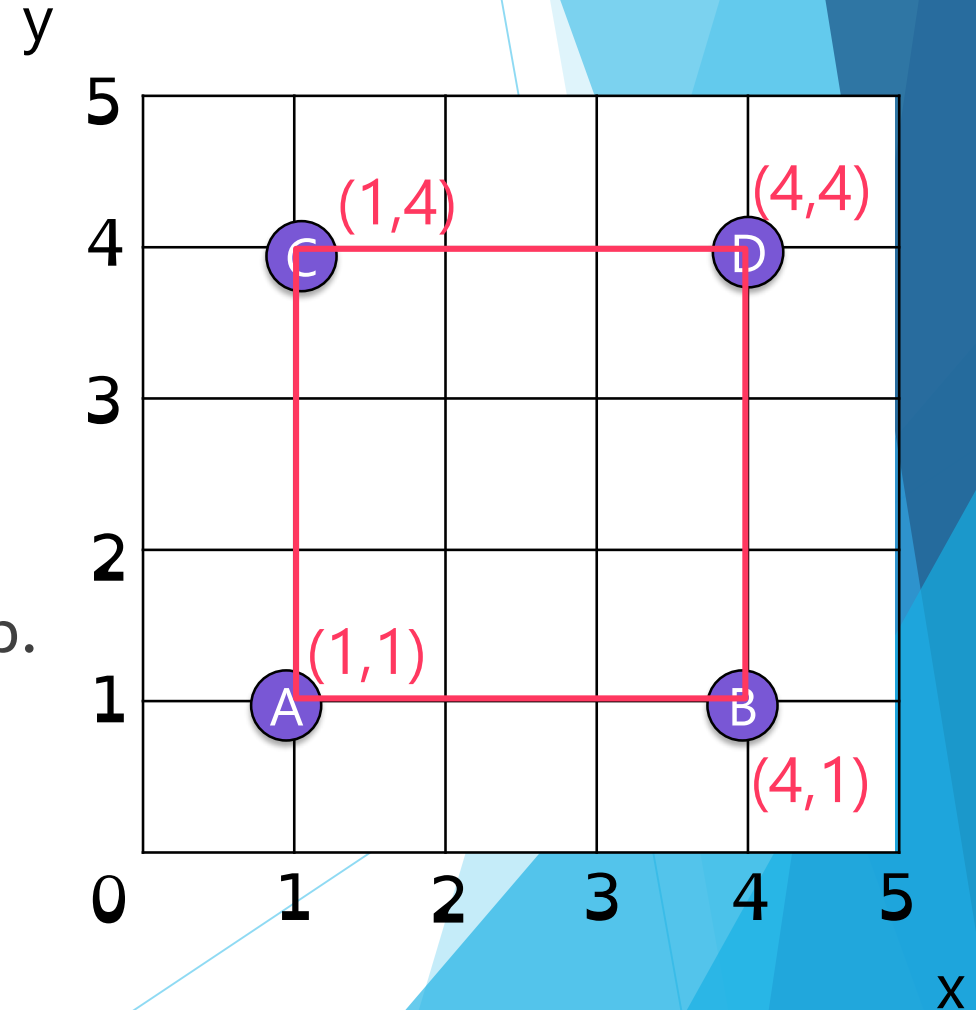
To be able to move shapes and coordinates in the first quadrant

Talking Time:

Give Point A's coordinates on the grid shown.

Then, do the following.

- ▶ Translate Point A three spaces right. Label this new coordinate Point B.
- ▶ Translate Point A three spaces up. Label this new coordinate Point C.
- ▶ Translate Point A three spaces right and three up. Label this new coordinate Point D.
- ▶ Join Points A, B, C and D together.



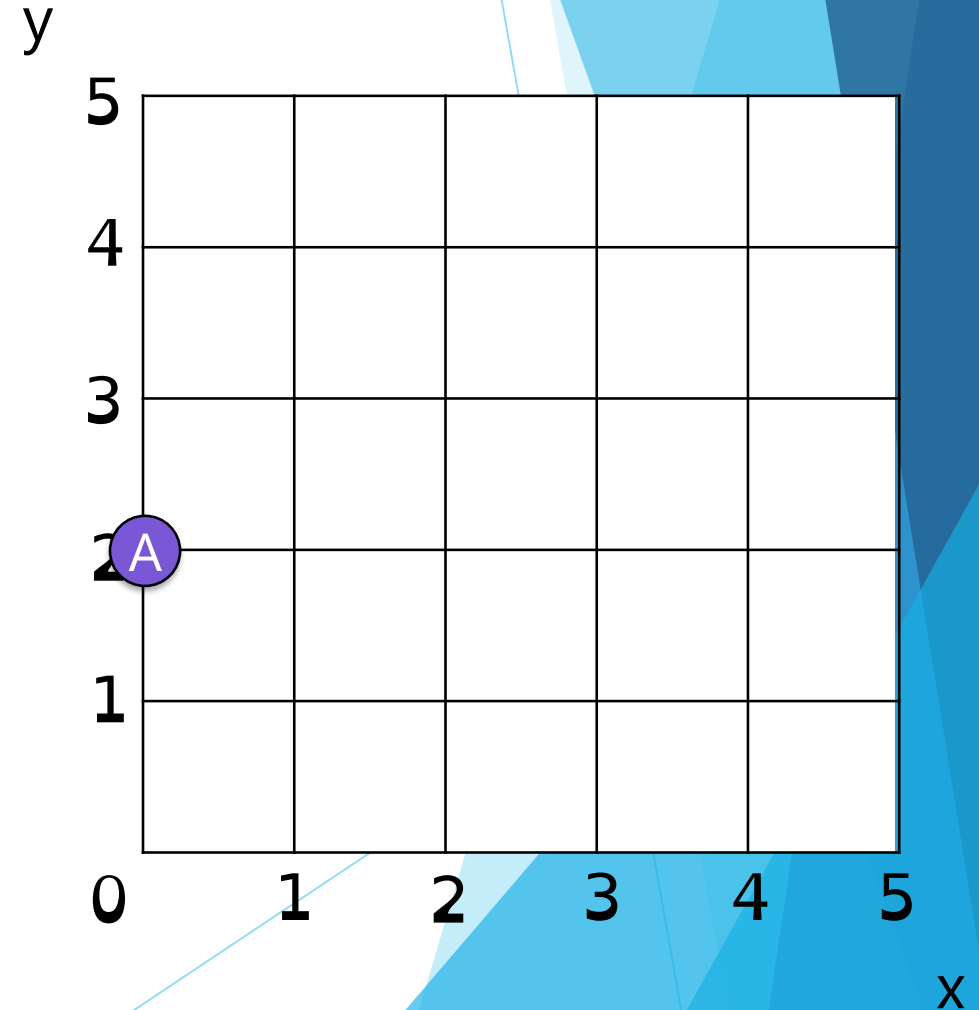
To be able to move shapes and coordinates in the first quadrant

Activity 3:

Give Point A's coordinates on the grid shown.

Then, do the following.

- ▶ Translate Point A four spaces right.
Label this new coordinate Point B.
- ▶ Translate Point A one space right and two up.
Label this new coordinate Point C.
- ▶ Translate Point A five spaces right and two up.
Label this new coordinate Point D.
- ▶ Join Points A, B, C and D together.



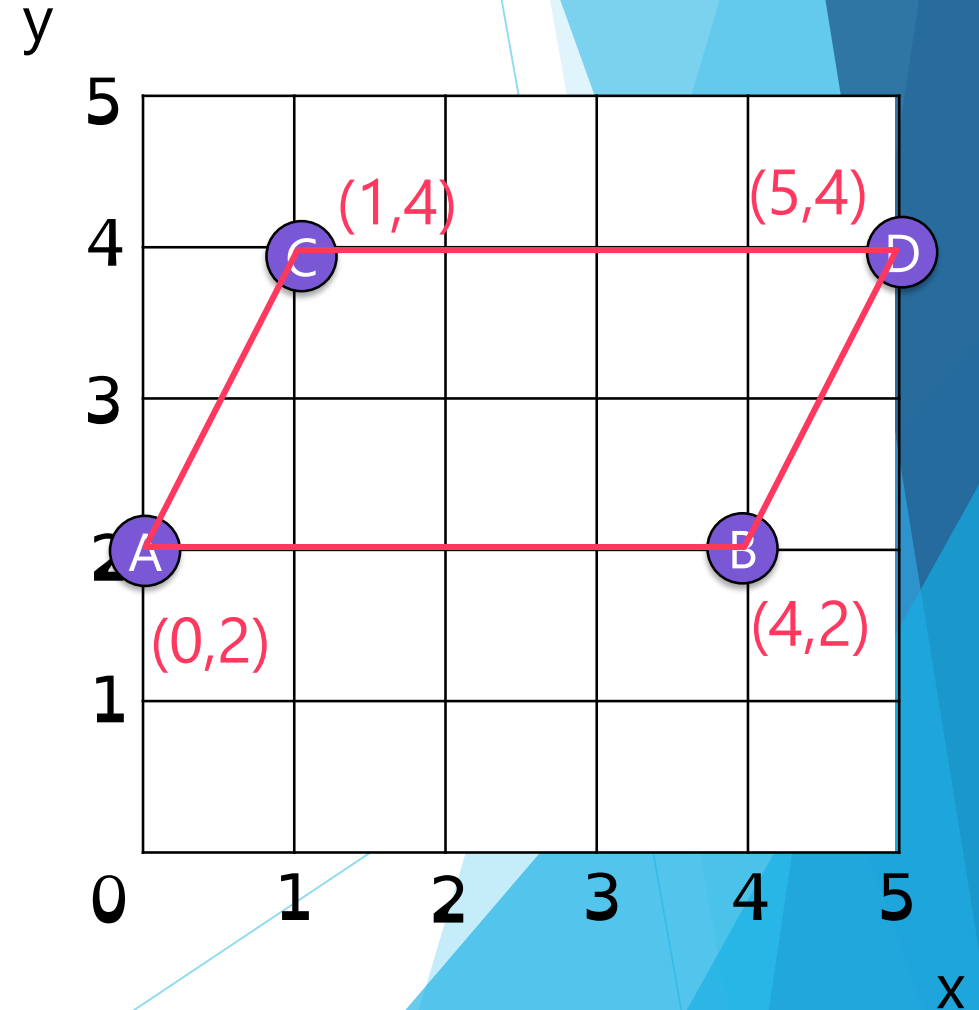
To be able to move shapes and coordinates in the first quadrant

Activity 3:

Give Point A's coordinates on the grid shown.

Then, do the following.

- ▶ Translate Point A four spaces right. Label this new coordinate Point B.
- ▶ Translate Point A one space right and two up. Label this new coordinate Point C.
- ▶ Translate Point A five spaces right and two up. Label this new coordinate Point D.
- ▶ Join Points A, B, C and D together.

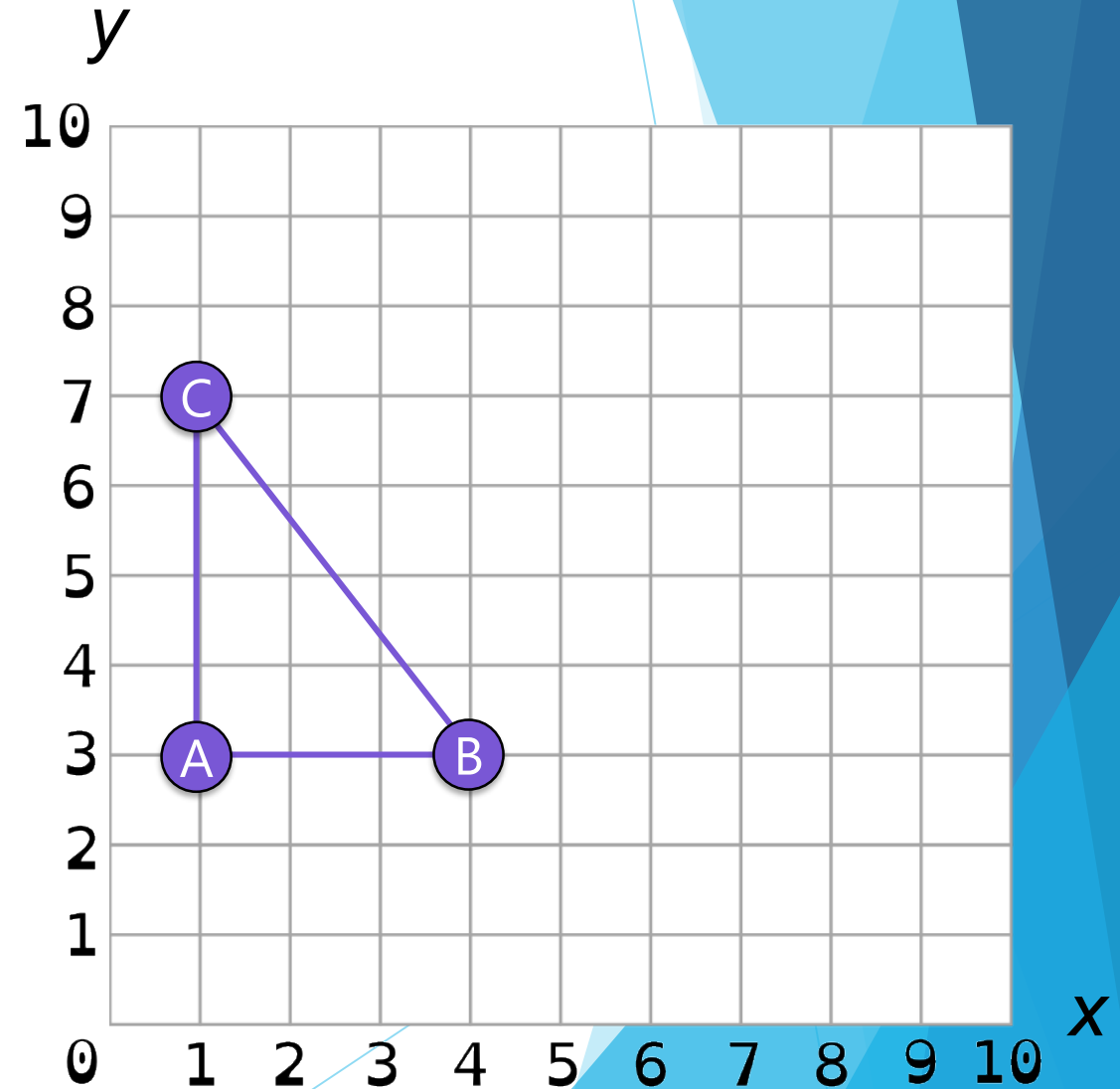


To be able to move shapes and coordinates in the first quadrant

Talking Time:

Give the original triangle's coordinates, then translate the shape right 5 places and up 2 places. Complete the table below.

original coordinates	translation's coordinates

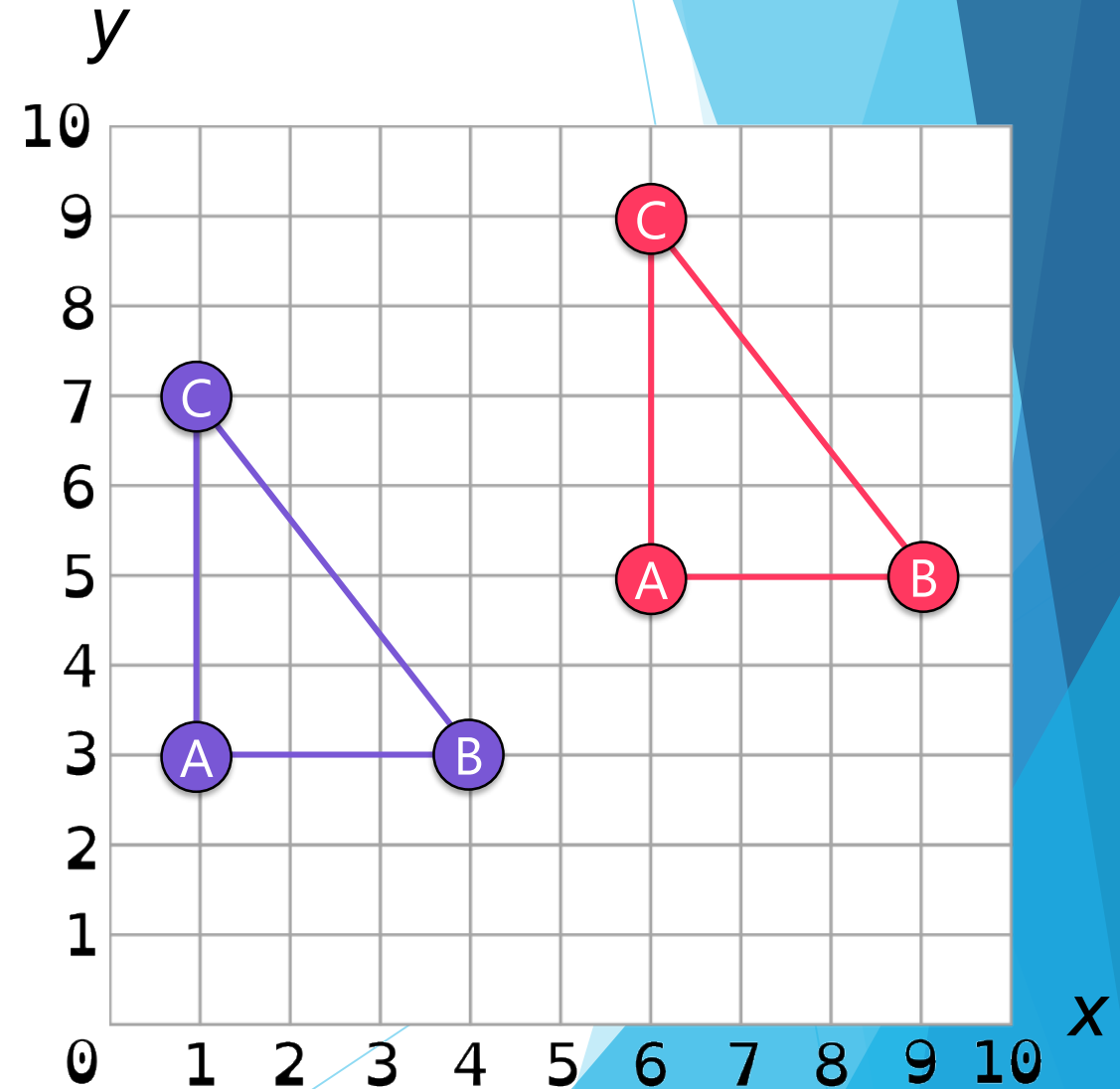


To be able to move shapes and coordinates in the first quadrant

Talking Time:

Give the original triangle's coordinates, then translate the shape right 5 places and up 2 places. Complete the table below.

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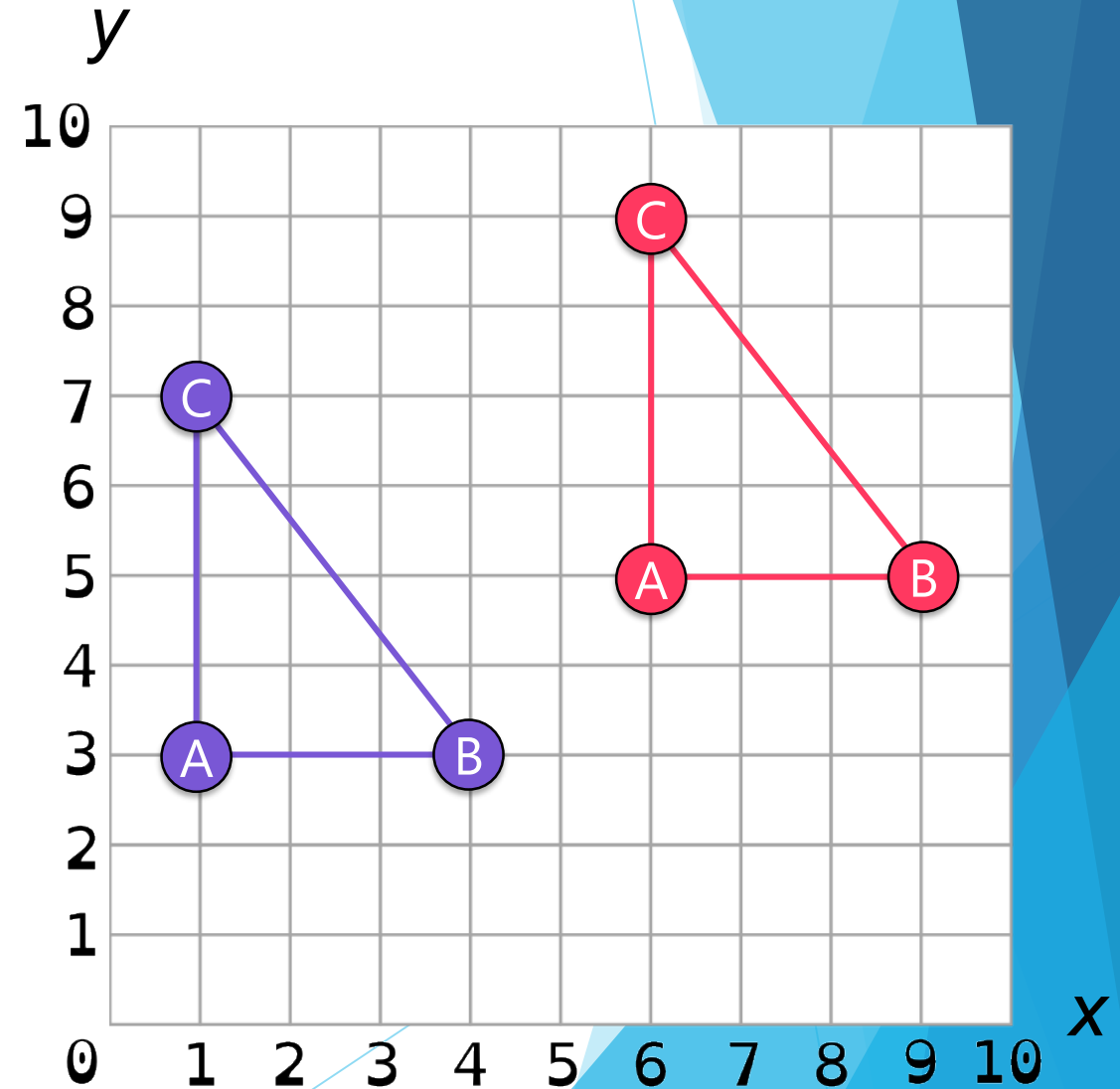


To be able to move shapes and coordinates in the first quadrant

Talking Time:

Give the original triangle's coordinates, then translate the shape right 5 places and up 2 places. Complete the table below.

original coordinates	translation's coordinates
(1,3)	
(4,3)	
(1,7)	

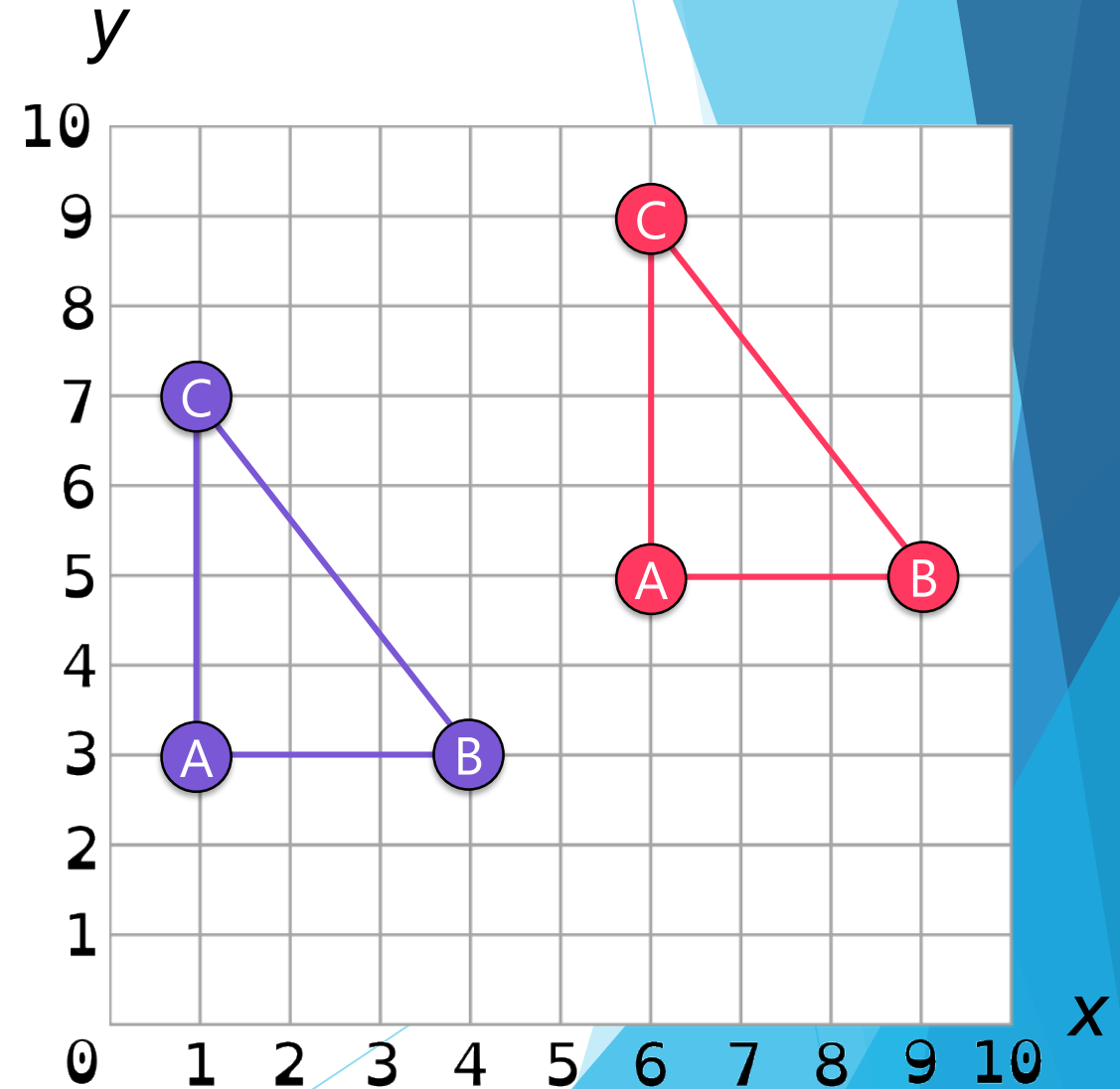


To be able to move shapes and coordinates in the first quadrant

Talking Time:

Give the original triangle's coordinates, then translate the shape right 5 places and up 2 places. Complete the table below.

original coordinates	translation's coordinates
(1,3)	(6,5)
(4,3)	(9,5)
(1,7)	(6,9)

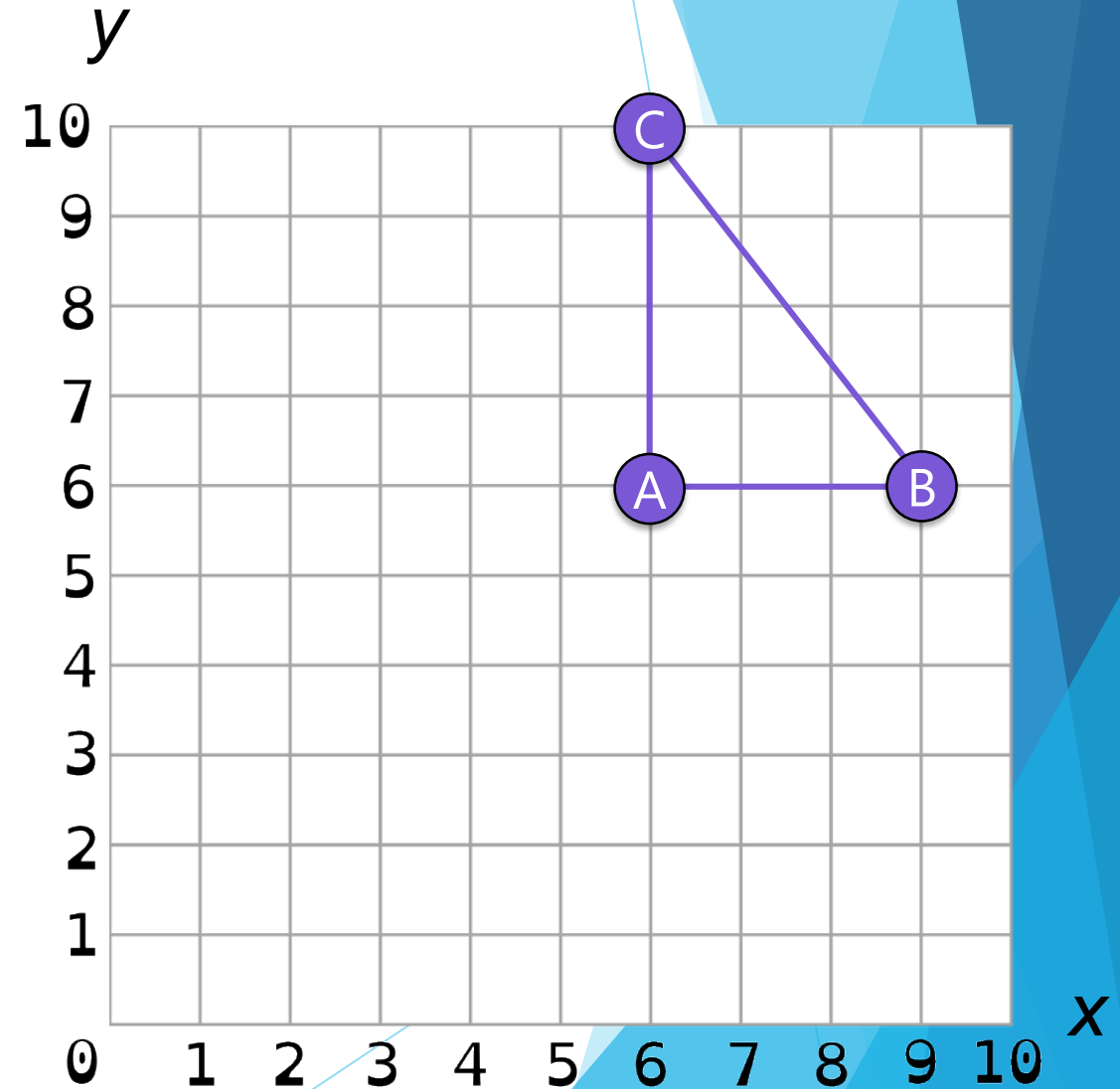


To be able to move shapes and coordinates in the first quadrant

Talking Time:

Give the original triangle's coordinates, then translate the shape left 2 places and down 4 places. Complete the table below.

original coordinates	translation's coordinates

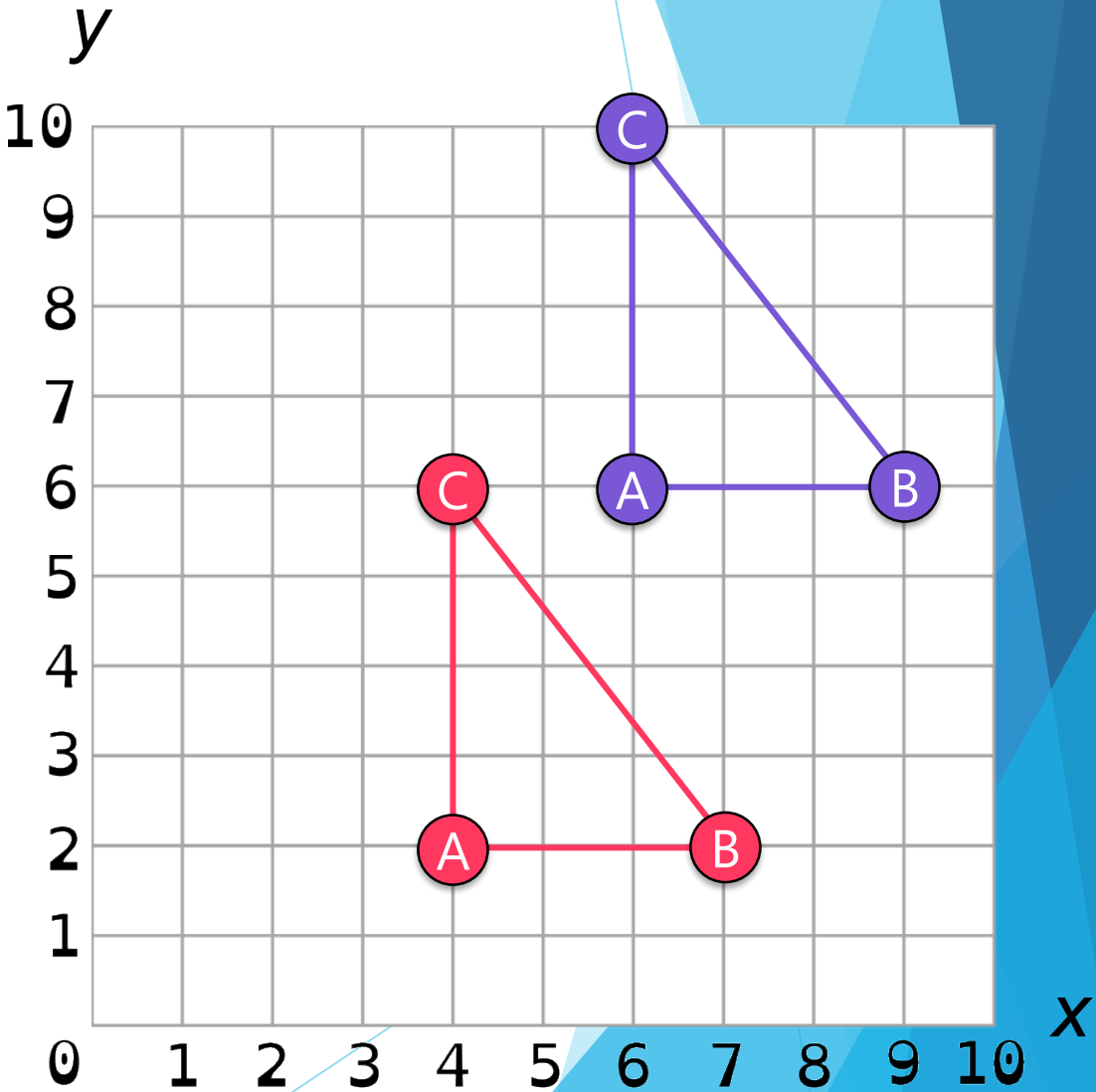


To be able to move shapes and coordinates in the first quadrant

Talking Time:

Give the original triangle's coordinates, then translate the shape left 2 places and down 4 places. Complete the table below.

original coordinates	translation's coordinates

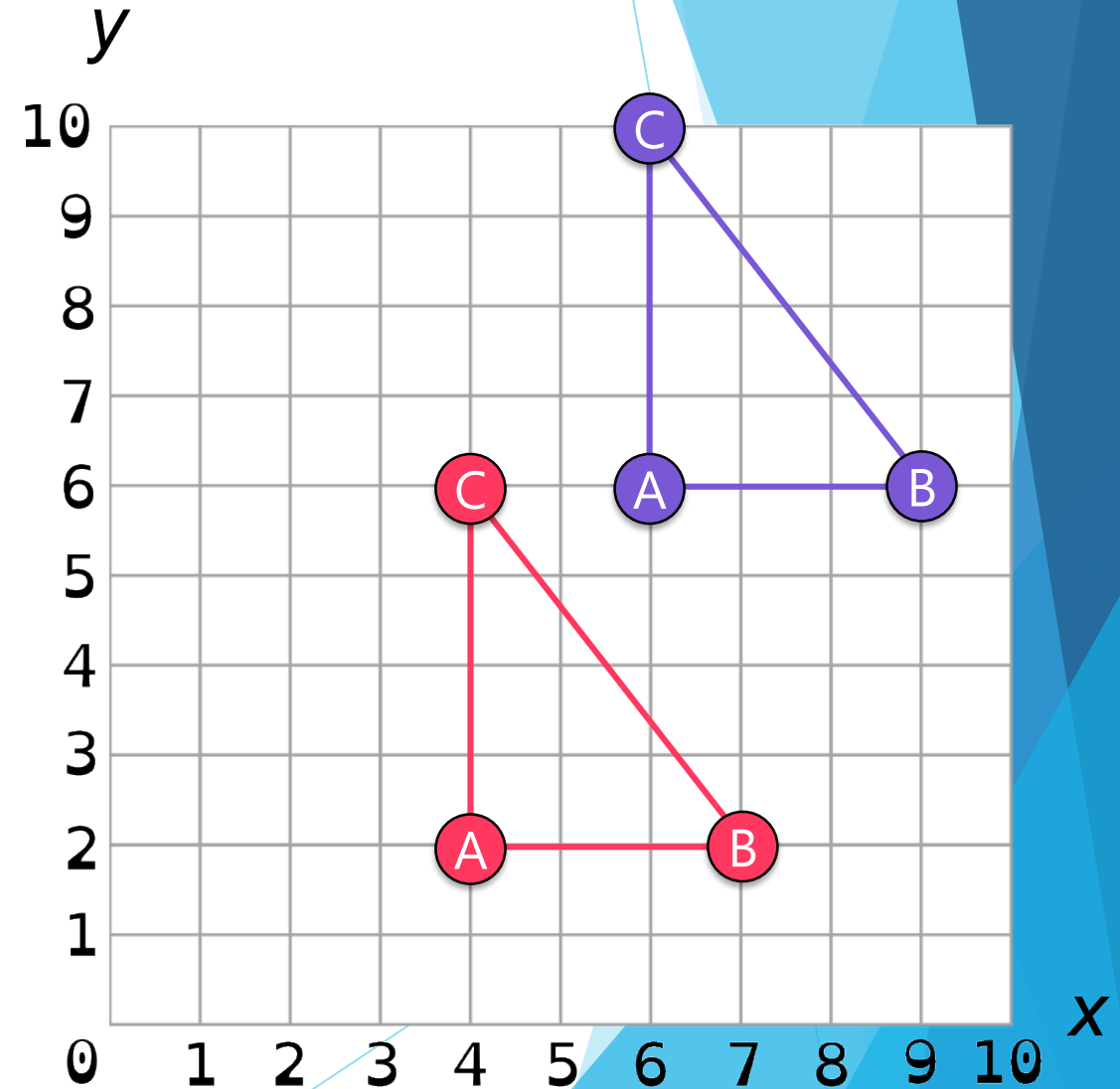


To be able to move shapes and coordinates in the first quadrant

Talking Time:

Give the original triangle's coordinates, then translate the shape left 2 places and down 4 places. Complete the table below.

original coordinates	translation's coordinates
(6,6)	
(9,6)	
(6,10)	

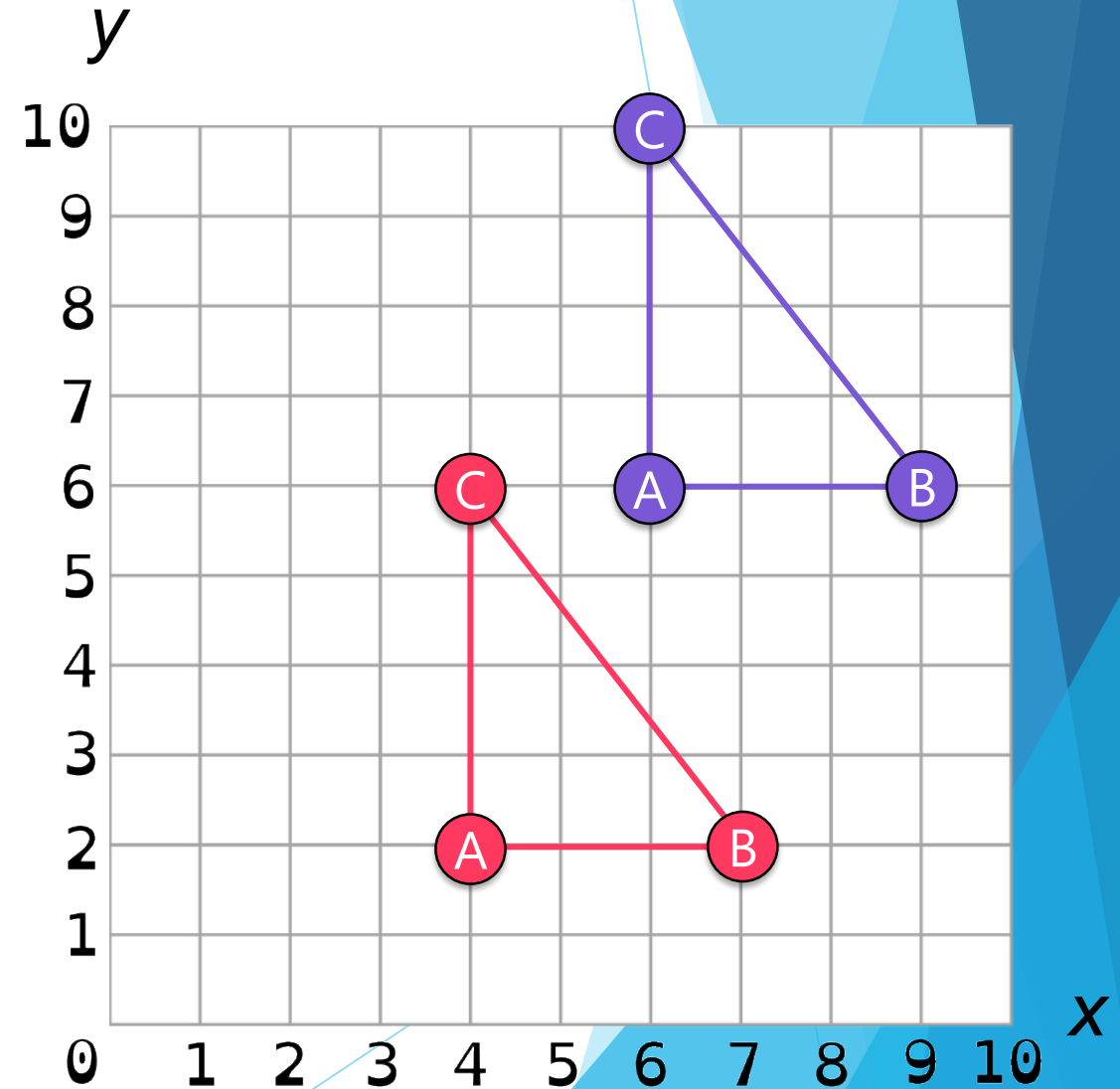


To be able to move shapes and coordinates in the first quadrant

Talking Time:

Give the original triangle's coordinates, then translate the shape left 2 places and down 4 places. Complete the table below.

original coordinates	translation's coordinates
(6,6)	(4,2)
(9,6)	(7,2)
(6,10)	(4,6)

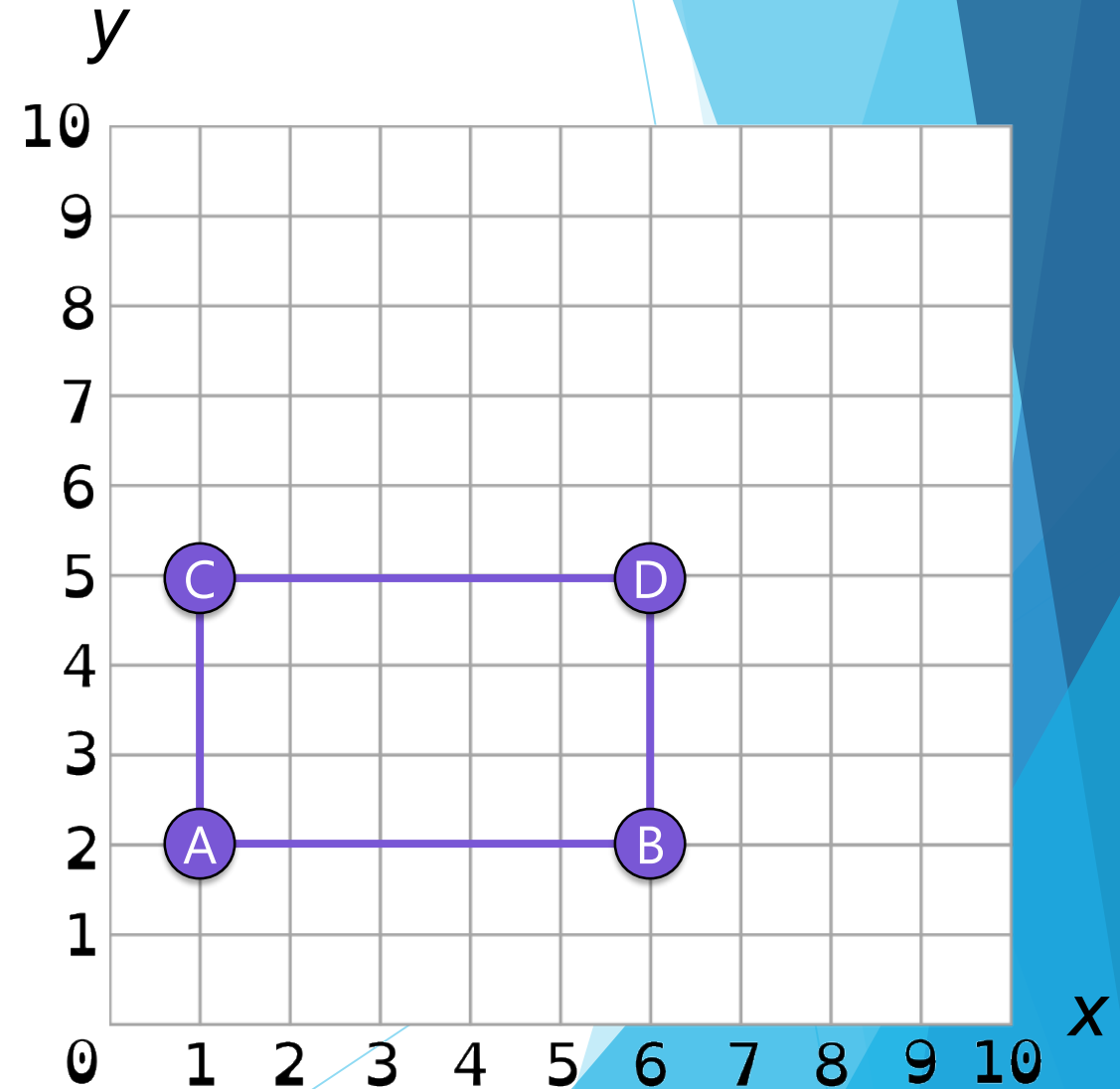


To be able to move shapes and coordinates in the first quadrant

Activity 4:

Give the original rectangle's coordinates, then translate the shape right 3 places and up 5 places. Complete the table below.

original coordinates	translation's coordinates

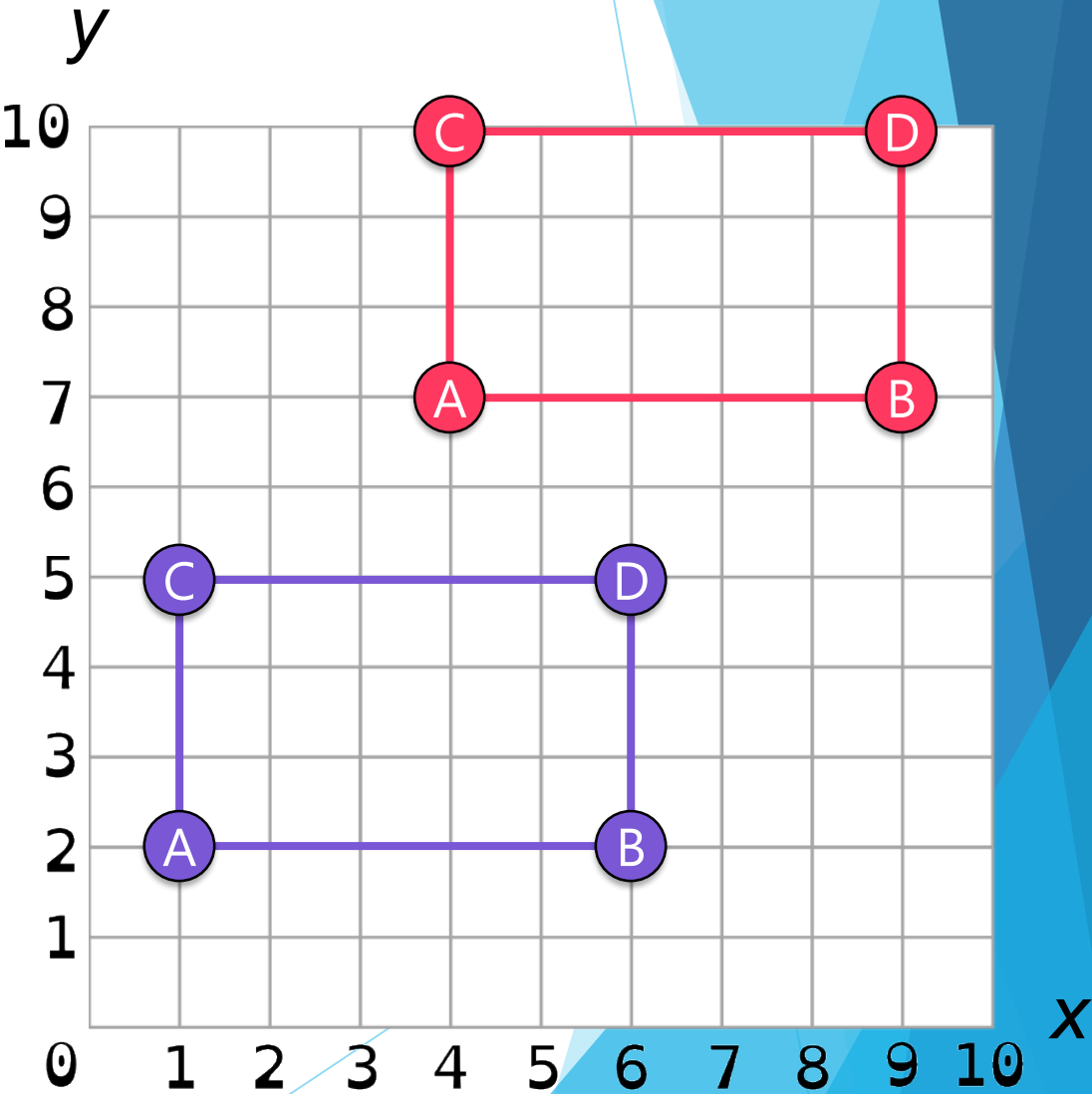


To be able to move shapes and coordinates in the first quadrant

Activity 4:

Give the original rectangle's coordinates, then translated the shape right 3 places and up 5 places. Complete the table below.

original coordinates	translation's coordinates

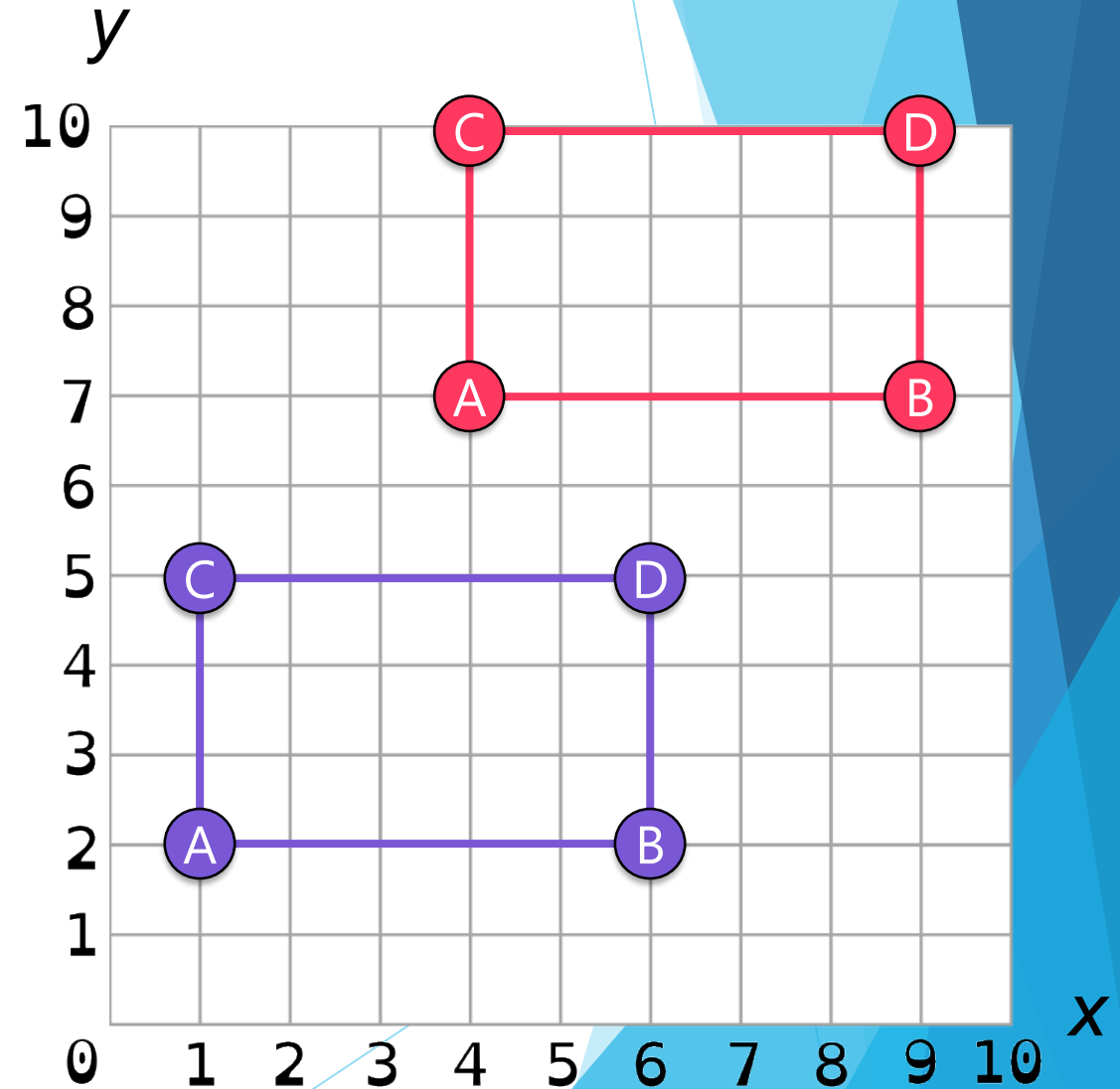


To be able to move shapes and coordinates in the first quadrant

Activity 4:

Give the original rectangle's coordinates, then translated the shape right 3 places and up 5 places. Complete the table below.

original coordinates	translation's coordinates
(1,2)	
(6,2)	
(1,5)	
(6,5)	

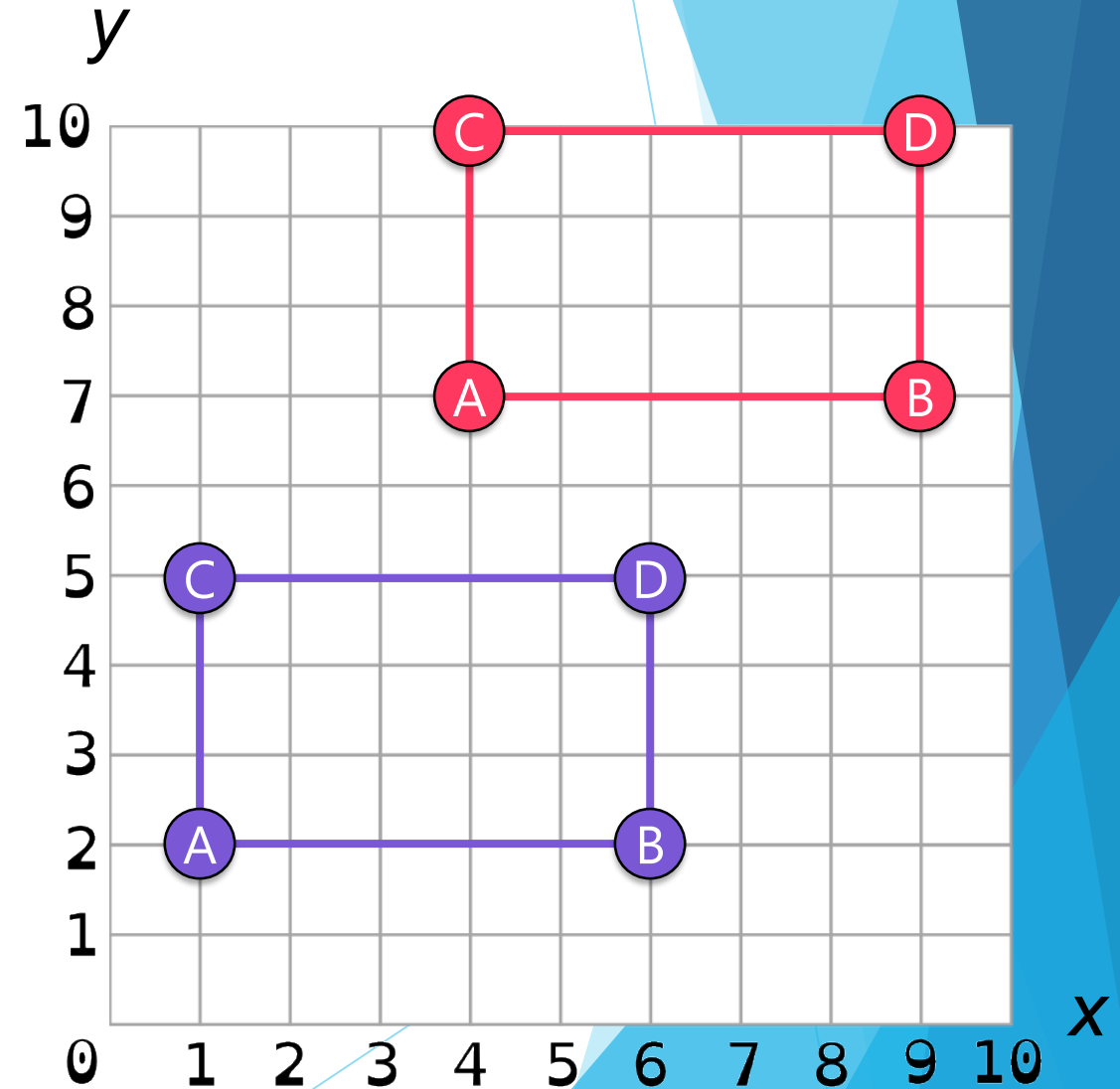


To be able to move shapes and coordinates in the first quadrant

Activity 4:

Give the original rectangle's coordinates, then translated the shape right 3 places and up 5 places. Complete the table below.

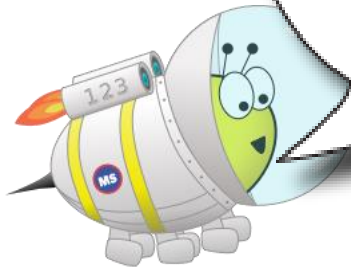
original coordinates	translation's coordinates
(1,2)	(4,7)
(6,2)	(9,7)
(1,5)	(4,10)
(6,5)	(9,10)



To be able to move shapes and coordinates in the first quadrant

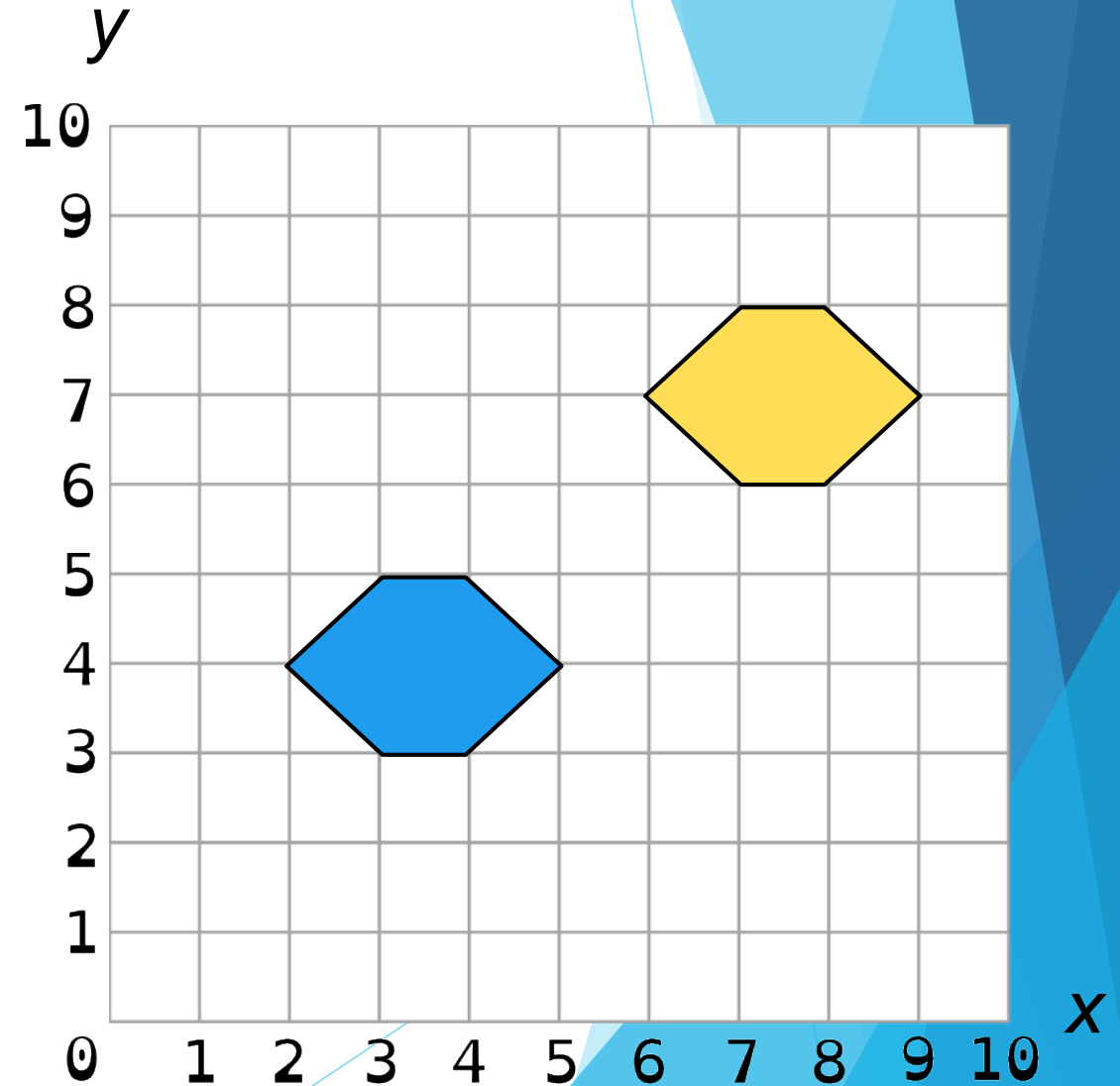
Evaluation:

I have translated the blue hexagon three spaces left and four spaces up to make the yellow hexagon.



Do you agree?

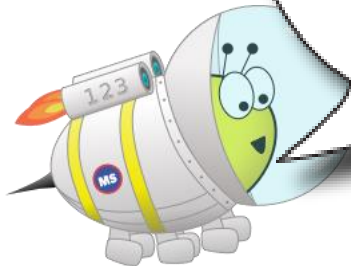
Explain your answer.



To be able to move shapes and coordinates in the first quadrant

Evaluation:

I have translated the blue hexagon three spaces left and four spaces up to make the yellow hexagon.



No, I do not agree. The blue hexagon has moved four spaces right and three spaces up!

