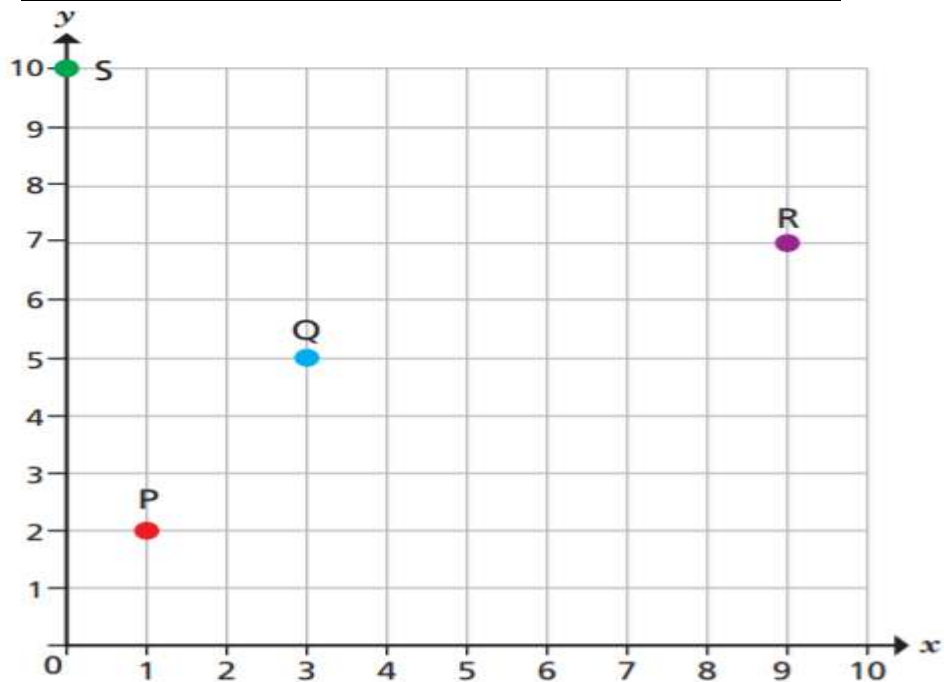


LO: To translate shapes on coordinate grids (bronze).

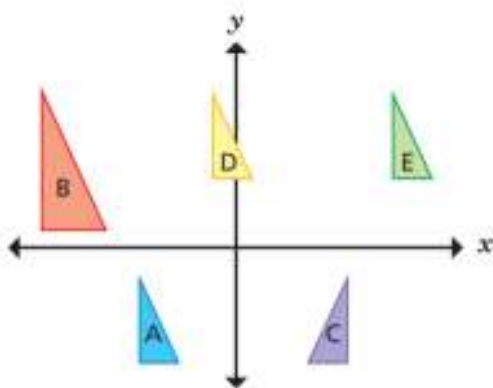
1)



Describe the translations.

- a) From P to Q is right and up
- b) From Q to R is right and up
- c) From R to S is left and up
- d) From S to P is _____ and _____
- e) From Q to P is _____ and _____

2)

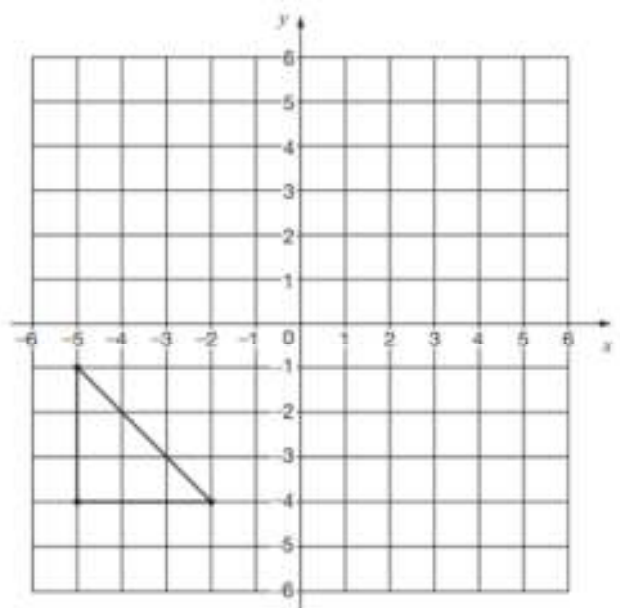


Which triangles are translations of each other?

Explain why the others are not translations.

3)

Here is a triangle drawn on a coordinate grid.



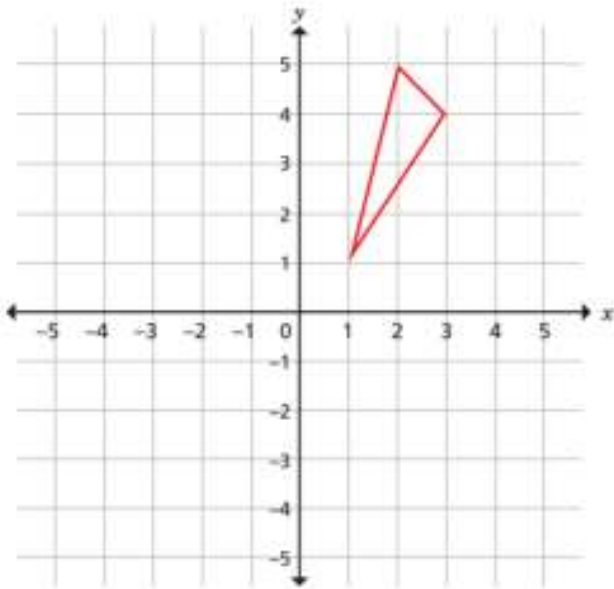
The triangle is translated 7 right and 5 up.

Draw the triangle in its new position.

LO: To translate shapes on coordinate grids (silver).

1)

Translate the triangle 6 left.

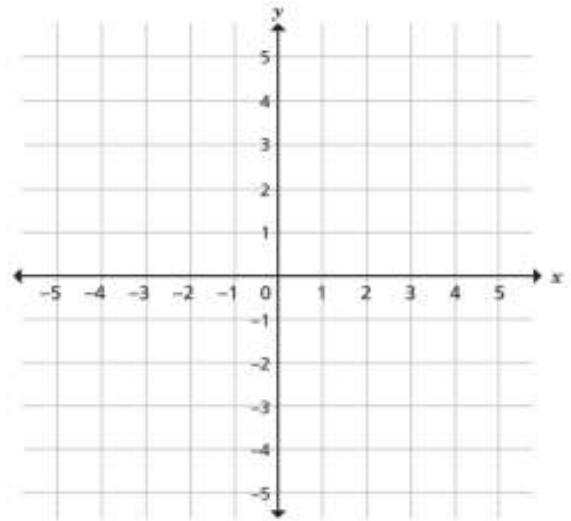


2)

These coordinates form a quadrilateral: $(-5, 5)$, $(-5, 1)$, $(-1, 4)$, $(-1, 2)$

It is translated 3 right and 4 down.

Draw the quadrilateral on the grid in its new position.



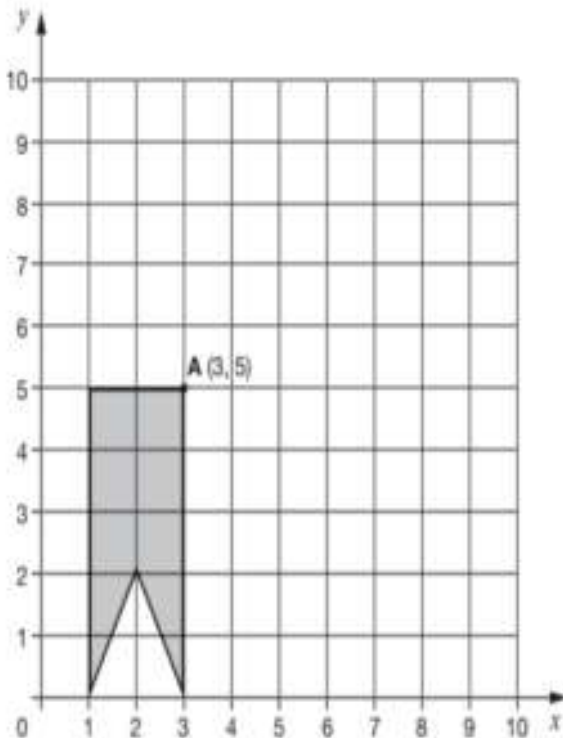
3)

Here is a shape on a grid.

The shape is translated so that point A moves to $(7, 8)$.

Draw the shape in its new position.

Use a ruler.



4)



A rectangle is translated two to the left and 4 up.

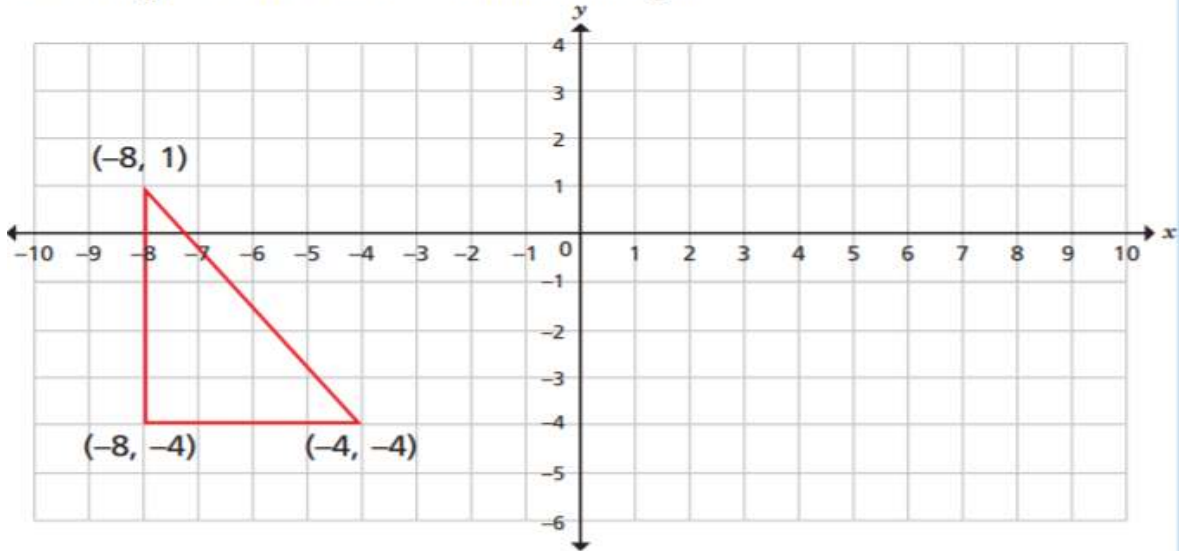
Three of the coordinates of the translated rectangle are: $(6, 8)$, $(10, 14)$ and $(10, 8)$.

What are the coordinates of the original rectangle?

LO: To translate shapes on coordinate grids (gold).

1)

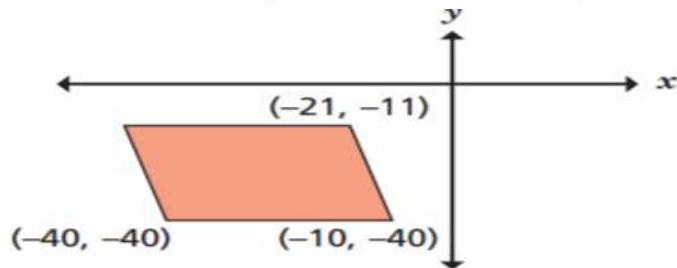
A triangle is drawn on the coordinate grid.



- a) Translate the triangle 9 right and 1 down.
- b) Tick the correct box for each coordinate.

Point	Inside the new triangle	Outside the new triangle	On the perimeter of the new triangle
(0, 0)			
(4, -5)			
(2, -1)			
(-6, -3)			
(3, -4)			

2)



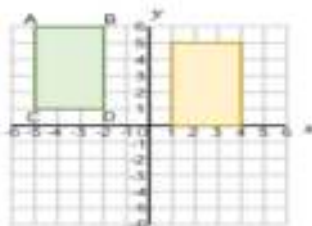
This parallelogram has been translated 50 left and 25 down.

What were the coordinates of **all four** vertices before it was translated?

True or False?

3)

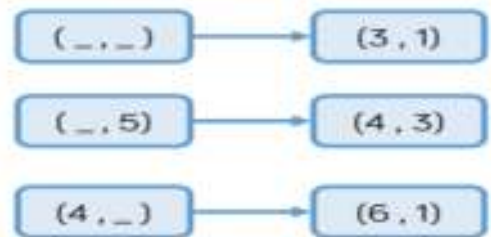
Dexter has translated the rectangle ABCD 6 units down and 1 unit to the right to get to the yellow rectangle.



Explain your reasoning.

4)

These three coordinates have all been translated in the same way.

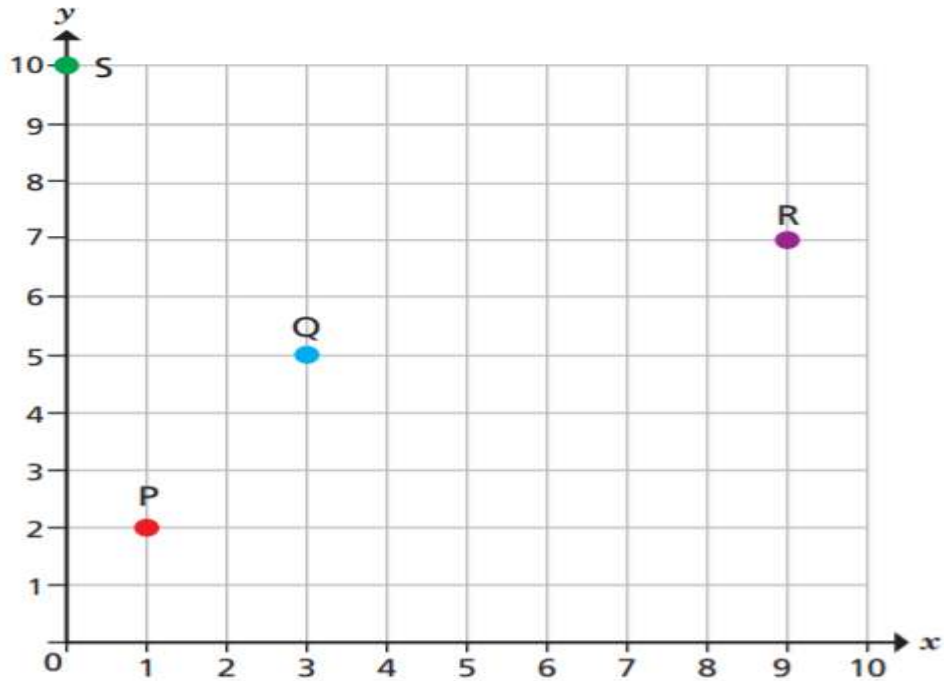


Can you work out the missing coordinates?

Describe the translation.

LO: To translate shapes on coordinate grids (bronze)-answers.

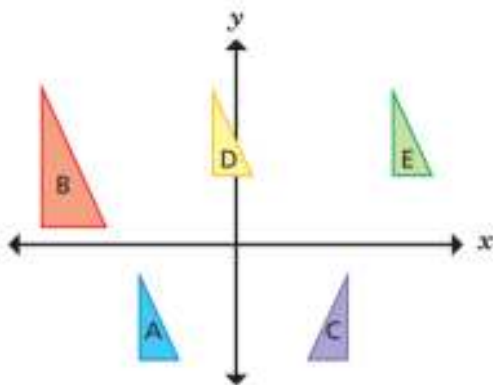
1)



Describe the translations.

- a) From P to Q is right and up
- b) From Q to R is right and up
- c) From R to S is left and up
- d) From S to P is and
- e) From Q to P is and

2)

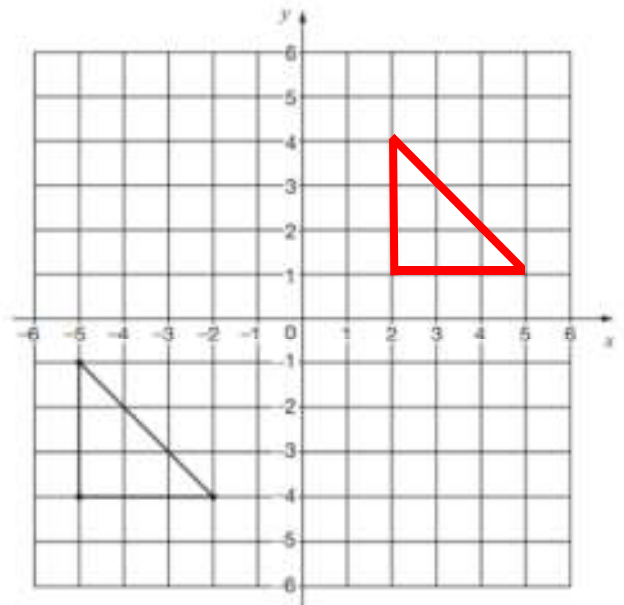


Which triangles are translations of each other?

Explain why the others are not translations.

3)

Here is a triangle drawn on a coordinate grid.



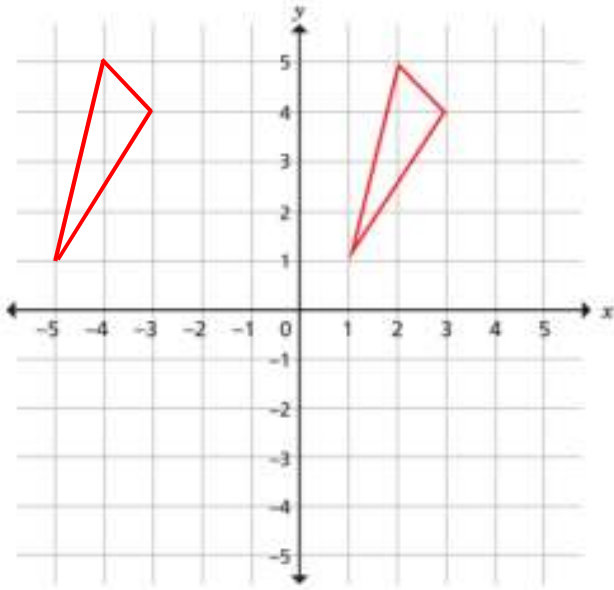
The triangle is translated 7 right and 5 up.

Draw the triangle in its new position.

LO: To translate shapes on coordinate grids (silver)-answers.

1)

Translate the triangle 6 left.

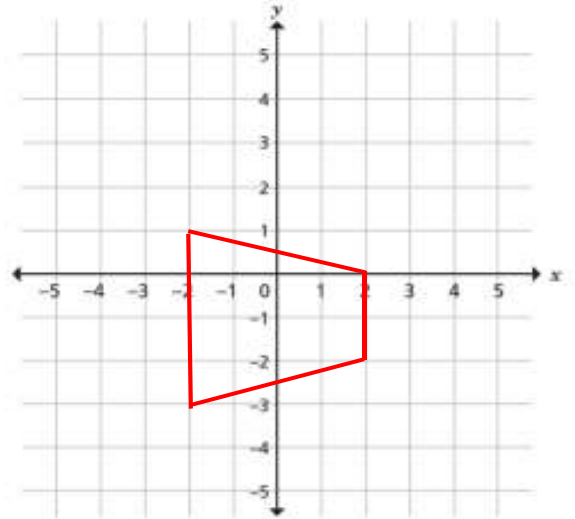


2)

These coordinates form a quadrilateral: $(-5, 5)$, $(-5, 1)$, $(-1, 4)$, $(-1, 2)$

It is translated 3 right and 4 down.

Draw the quadrilateral on the grid in its new position.



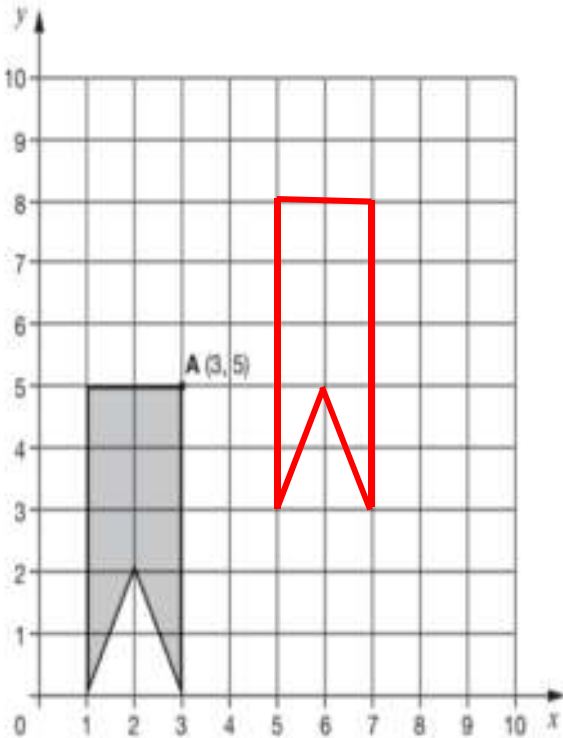
3)

Here is a shape on a grid.

The shape is translated so that point A moves to $(7, 8)$.

Draw the shape in its new position.

Use a ruler.



4)



A rectangle is translated two to the left and 4 up.

Three of the coordinates of the translated rectangle are: $(6, 8)$, $(10, 14)$ and $(10, 8)$.

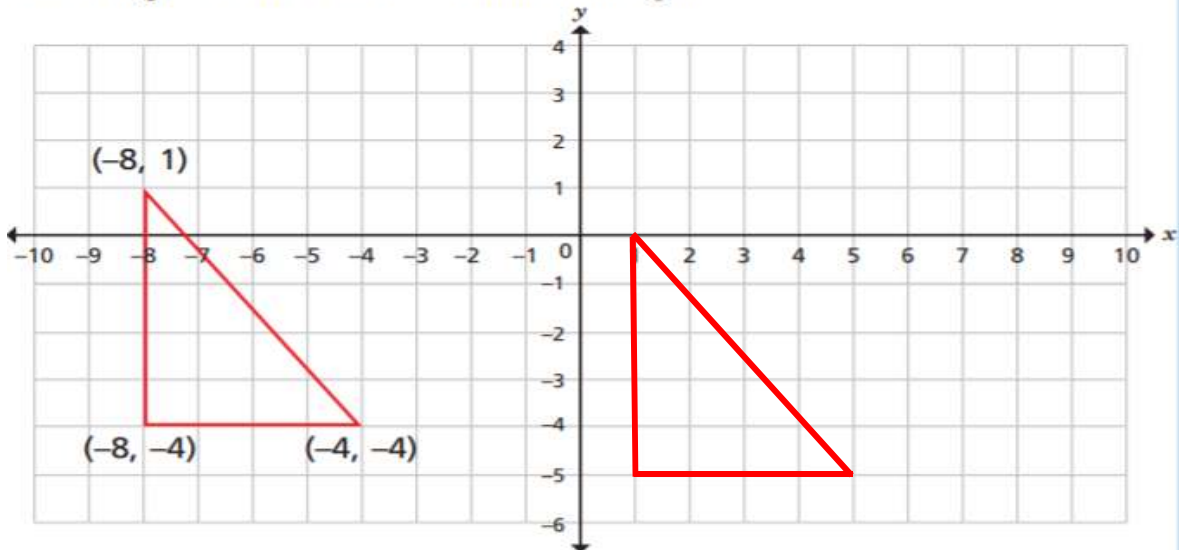
What are the coordinates of the original rectangle?

$(8, 4)$ $(8, 10)$ $(12, 10)$ $(12, 4)$

LO: To translate shapes on coordinate grids (gold)-answers.

1)

A triangle is drawn on the coordinate grid.

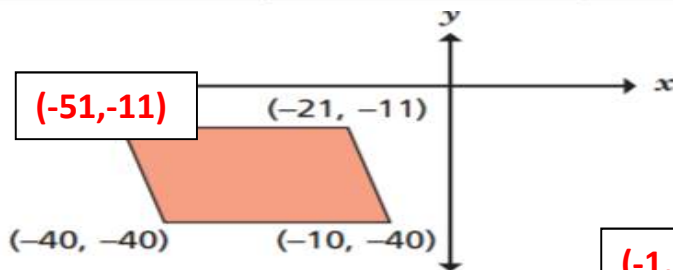


a) Translate the triangle 9 right and 1 down.

b) Tick the correct box for each coordinate.

Point	Inside the new triangle	Outside the new triangle	On the perimeter of the new triangle
(0, 0)		<input checked="" type="checkbox"/>	
(4, -5)			<input checked="" type="checkbox"/>
(2, -1)		<input checked="" type="checkbox"/>	
(-6, -3)		<input checked="" type="checkbox"/>	
(3, -4)	<input checked="" type="checkbox"/>		

2)



(-1,14) (29,14) (10,-15) (40,-15)

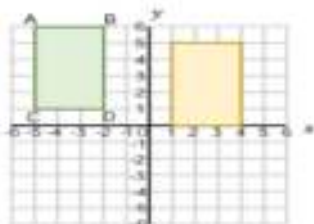
This parallelogram has been translated 50 left and 25 down.

What were the coordinates of **all** four vertices before it was translated?

True or False?

3)

Dexter has translated the rectangle ABCD 6 units down and 1 unit to the right to get to the yellow rectangle.

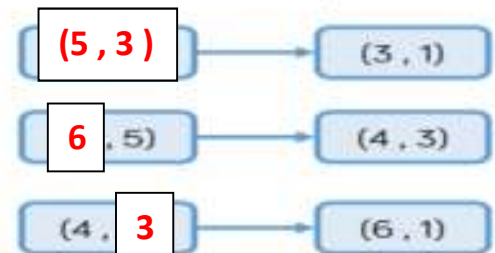


False, because...

Explain your reasoning.

4)

These three coordinates have all been translated in the same way.



Can you work out the missing coordinates?

Describe the translation. **Down 2, Left 2**