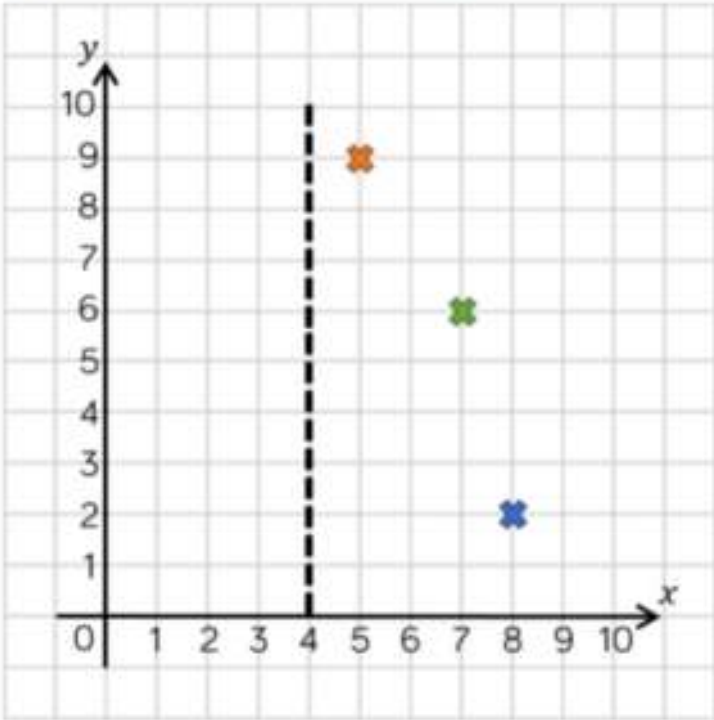


**LO: To reflect shapes on coordinate grids (bronze).**

1)

Reflect the coordinates

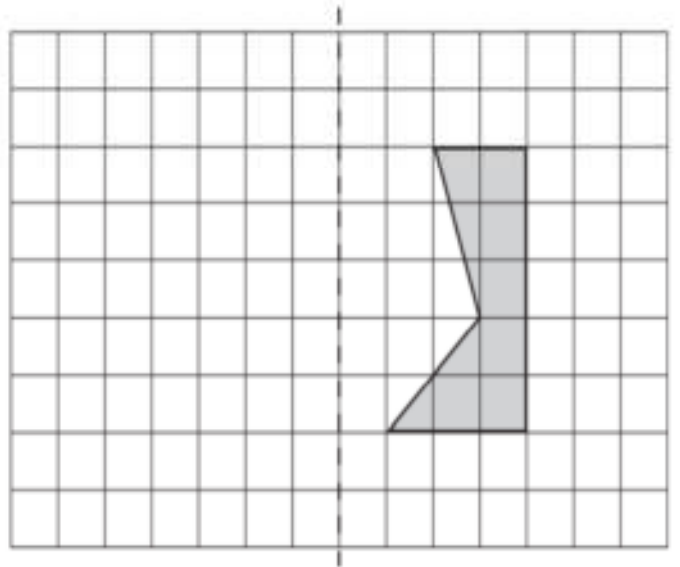


2)

Here is a shaded shape on a square grid.

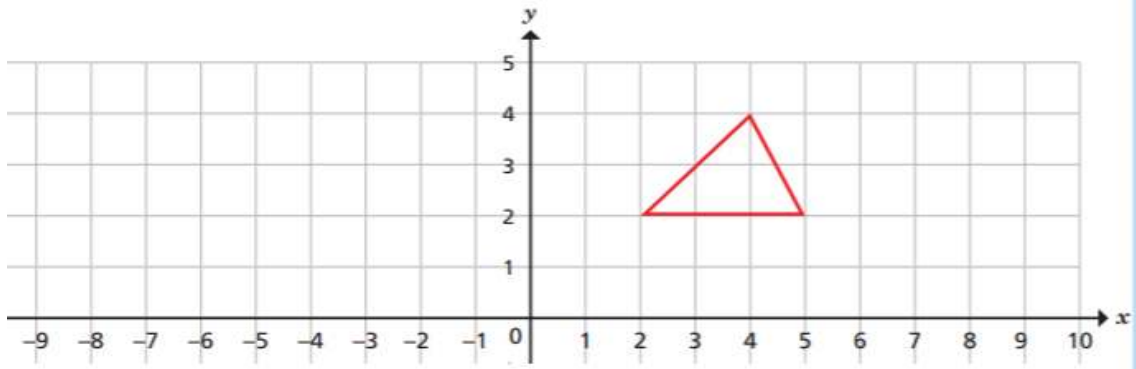
Reflect the shape in the mirror line.

Use a ruler.



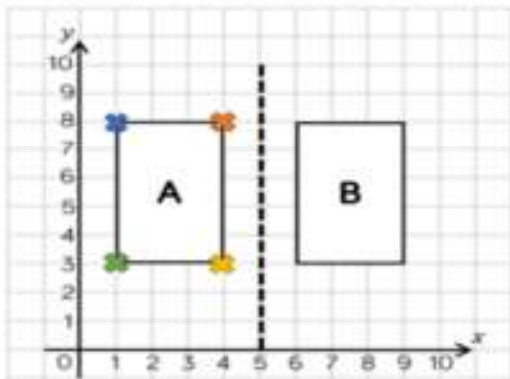
3)

Reflect the triangle in the y-axis.



4)

Object A is reflected in the mirror line to give image B. Write the coordinates of the vertices for each shape.



	Original Coordinate	Reflected Coordinate

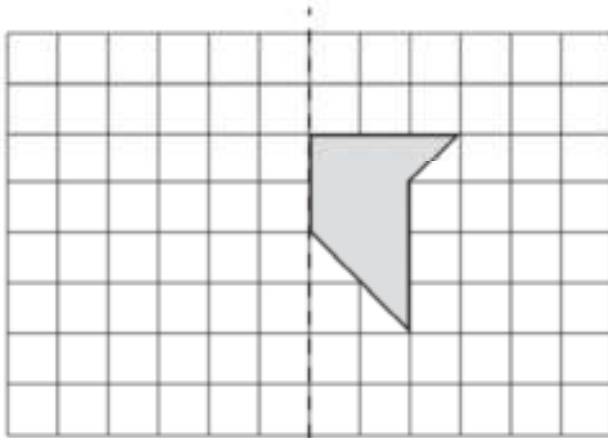
LO: To reflect shapes on coordinate grids (silver).

1)

Here is a shape on a grid.

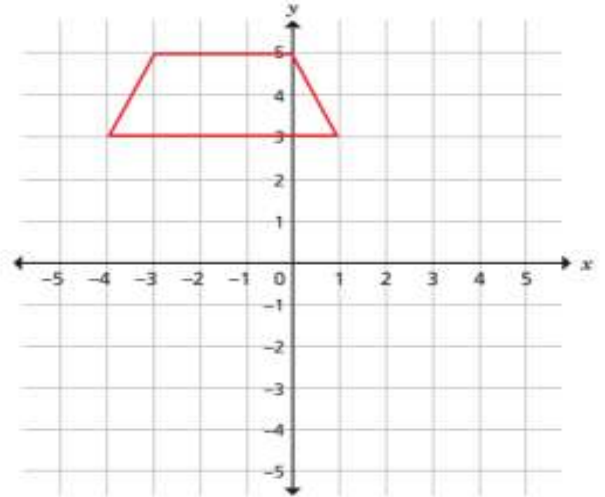
Complete the design so that it is symmetrical about the mirror line.

Use a ruler.



mirror line

2)



a) What is the name of the shape plotted on the grid?

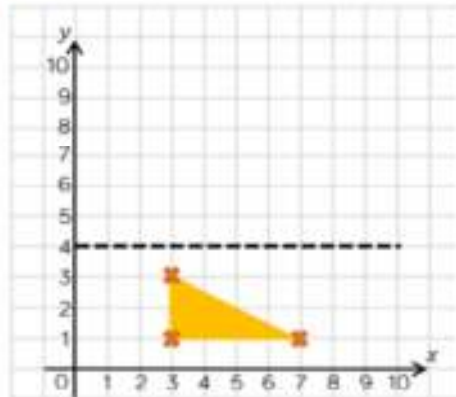
b) Reflect the shape in the  $x$ -axis.

3) Write the coordinates of the image after the object (triangle) has been reflected in the mirror line.

(   ,   )

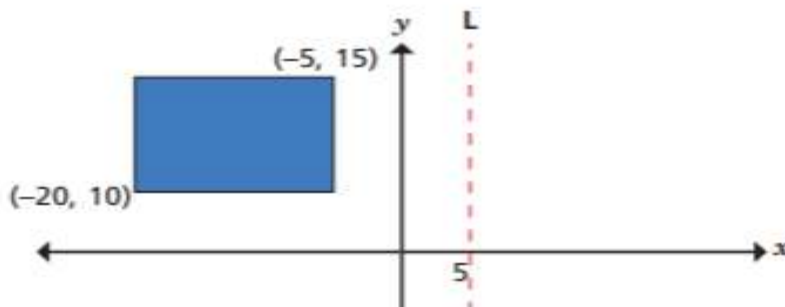
(   ,   )

(   ,   )



4)

The shape is reflected in the line marked L.



Work out the coordinates of the new vertices.

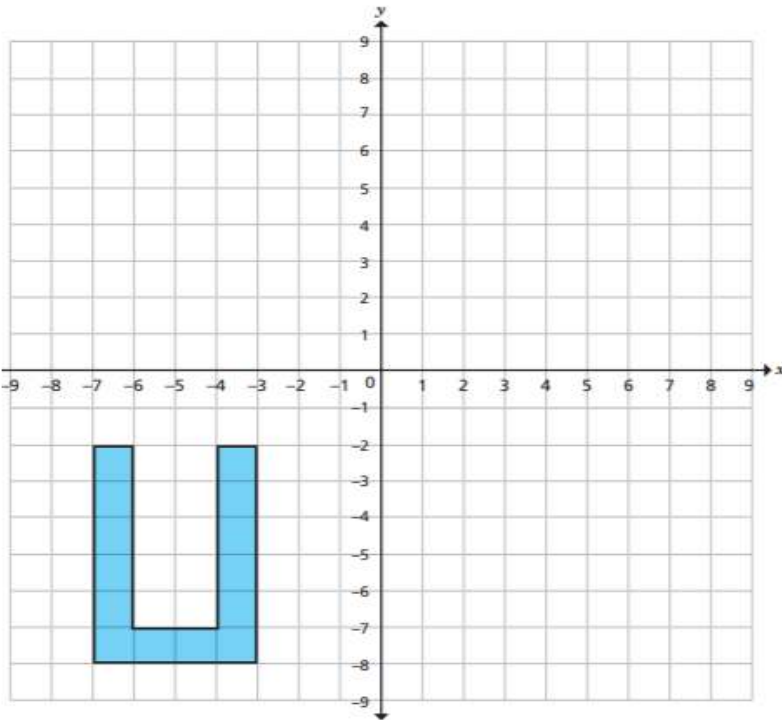
The new vertices are at

(   ,   )   (   ,   )   (   ,   )   (   ,   )

**LO: To reflect shapes on coordinate grids (gold).**

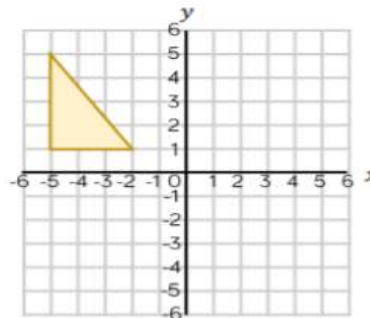
1)

An octagon is shown on the coordinate grid.

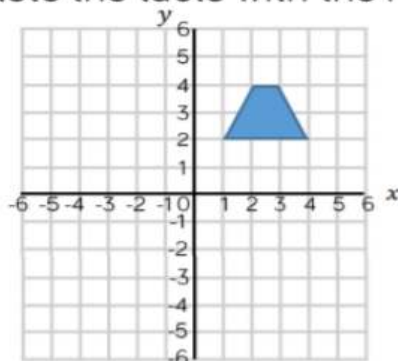


- Reflect the shape in the  $x$ -axis.
- Translate the new shape 10 right and 10 down.
- Reflect the new shape in the  $x$ -axis.
- What do you notice?

- 3) Translate the shape 4 units to the right.  
Then reflect the translated shape in the  $y$ -axis.



- 4) Reflect the trapezium in the  $x$ -axis and then the  $y$ -axis.  
Complete the table with the new coordinates of the shape.

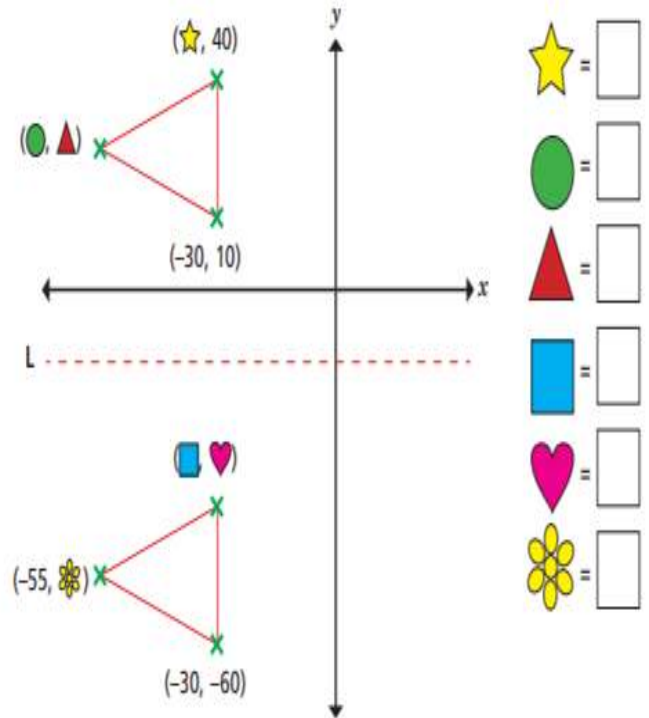


	Reflected in the $x$ -axis	Reflected in the $y$ -axis
(1, 2)		
(4, 2)		
(2, 4)		
(3, 4)		

2)

The isosceles triangle has been reflected in the line marked L.

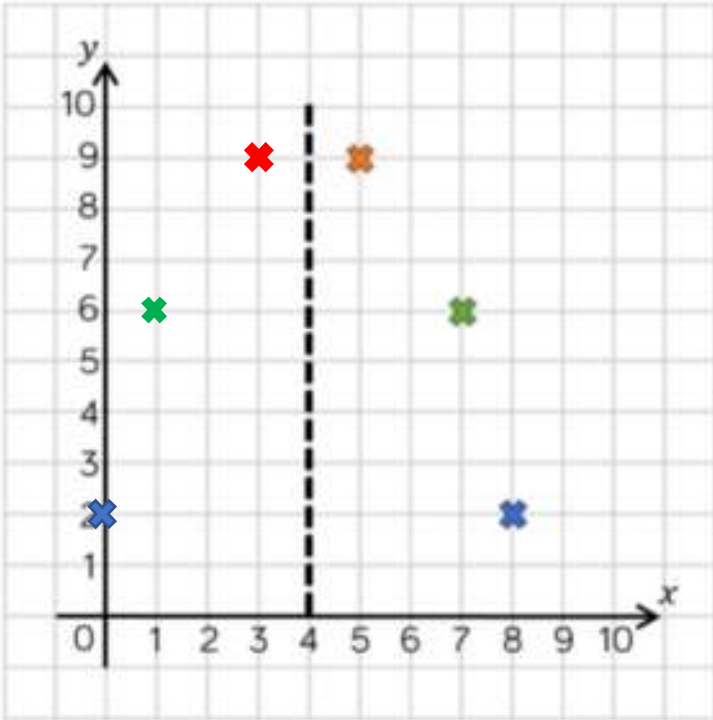
Work out the missing values.



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

1)

Reflect the coordinates

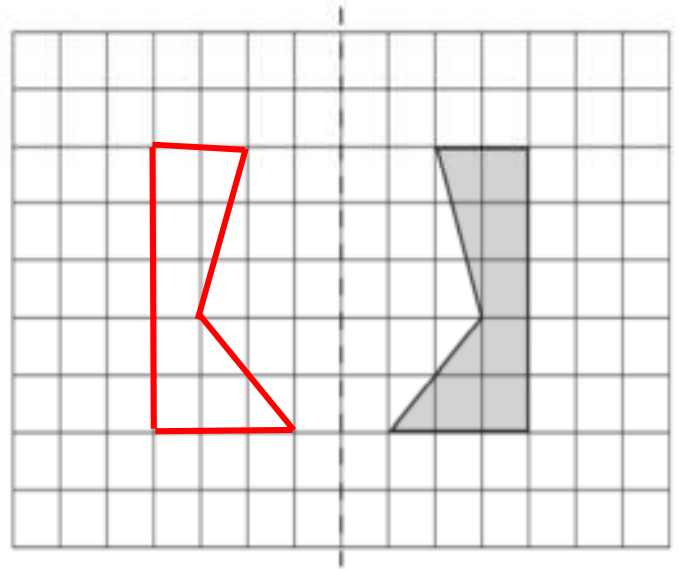


2)

Here is a shaded shape on a square grid.

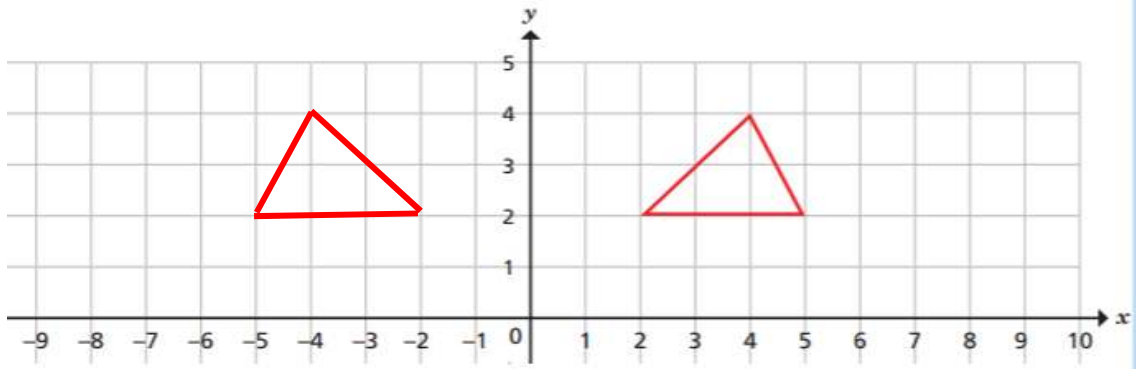
Reflect the shape in the mirror line.

Use a ruler.



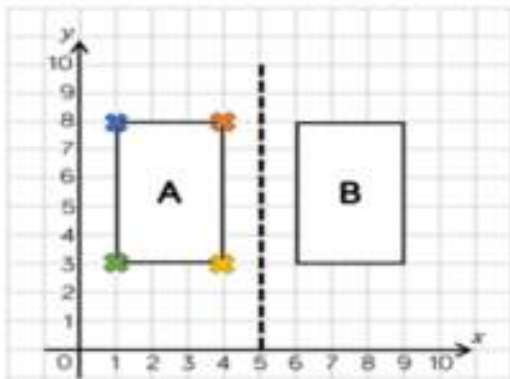
3)

Reflect the triangle in the y-axis.



4)

Object A is reflected in the mirror line to give image B. Write the coordinates of the vertices for each shape.



	Original Coordinate	Reflected Coordinate
	(1,8)	(6,8)
	(4,8)	(9,8)
	(1,3)	(6,3)
	(4,3)	(9,3)

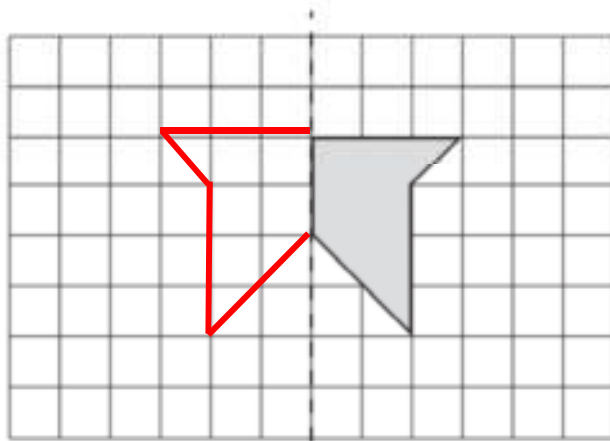
LO: To reflect shapes on coordinate grids (silver)-answers.

1)

Here is a shape on a grid.

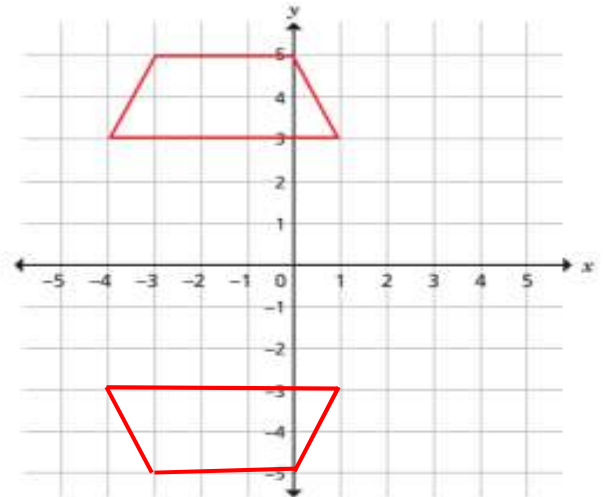
Complete the design so that it is symmetrical about the mirror line.

Use a ruler.



mirror line

2)



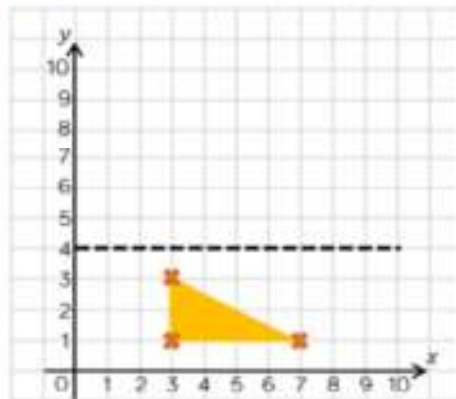
a) What is the name of the shape plotted on the grid?

Trapezium

b) Reflect the shape in the  $x$ -axis.

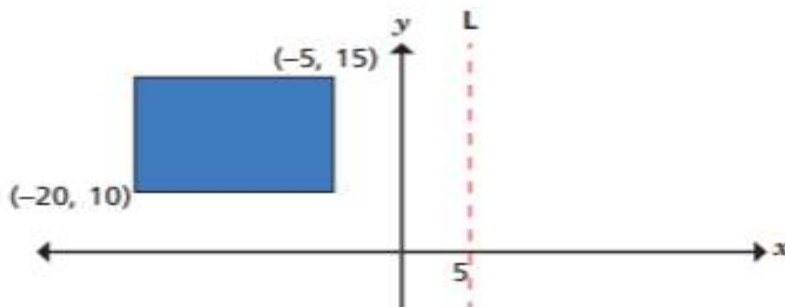
3) Write the coordinates of the image after the object (triangle) has been reflected in the mirror line.

- (3,5)
- (3,7)
- (7,7)



4)

The shape is reflected in the line marked L.



Work out the coordinates of the new vertices.

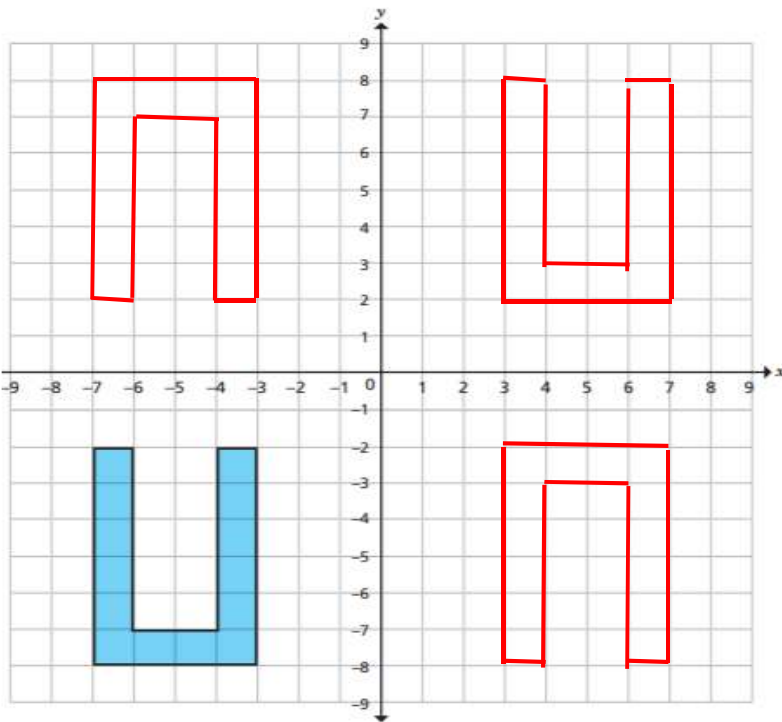
The new vertices are at

- (15,15)
- (15,10)
- (30,10)
- (30,15)

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

1)

An octagon is shown on the coordinate grid.

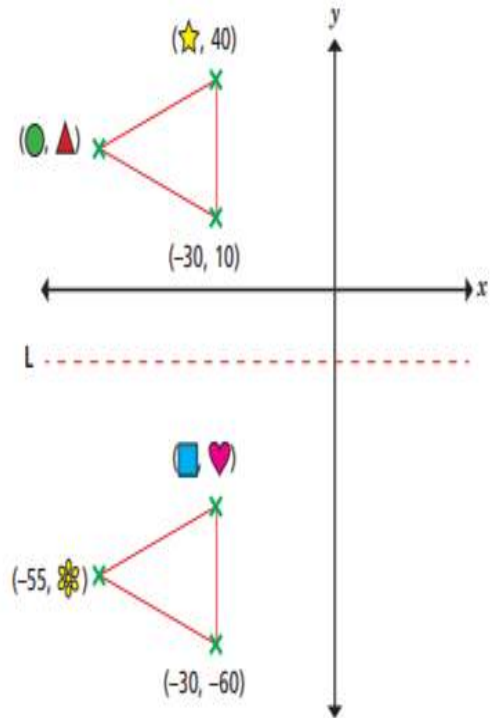


- Reflect the shape in the  $x$ -axis.
- Translate the new shape 10 right and 10 down.
- Reflect the new shape in the  $x$ -axis.
- What do you notice?

2)

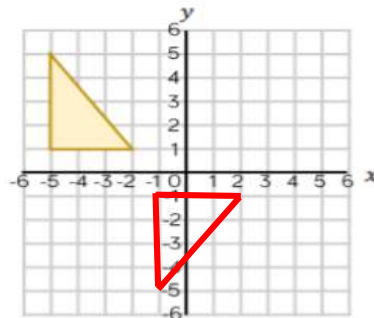
The isosceles triangle has been reflected in the line marked L.

Work out the missing values.

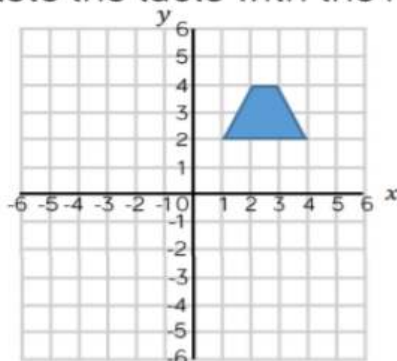


- =
- =
- =
- =
- =
- =

- Translate the shape 4 units to the right.  
Then reflect the translated shape in the  $y$ -axis.



- Reflect the trapezium in the  $x$ -axis and then the  $y$ -axis.  
Complete the table with the new coordinates of the shape.



	Reflected in the $x$ -axis	Reflected in the $y$ -axis
(1, 2)	<input type="text" value="(1,-2)"/>	<input type="text" value="(-1,2)"/>
(4, 2)	<input type="text" value="(4,-2)"/>	<input type="text" value="(-4,2)"/>
(2, 4)	<input type="text" value="(2,-4)"/>	<input type="text" value="(-2,4)"/>
(3, 4)	<input type="text" value="(3,-4)"/>	<input type="text" value="(-3,4)"/>