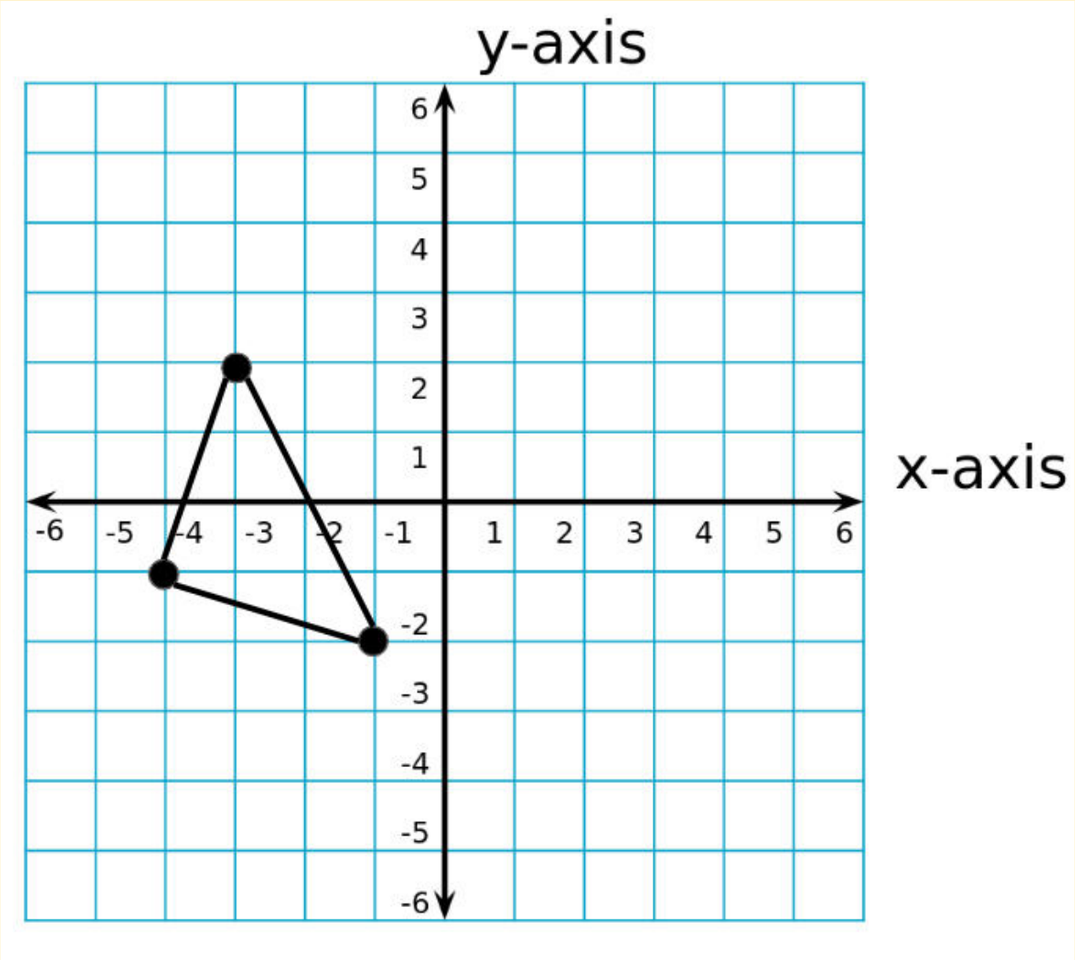
- **Trace the triangle on your transparency using the Vis-a-Vis marker.**
- **Translate the triangle horizontally, 4 positive spaces, and tape in place.**
- **Answer the 4 questions below.**



Congruent or Not?

1. Did the side lengths change?

   Yes No

2. Did the angle measures change?

   Yes No

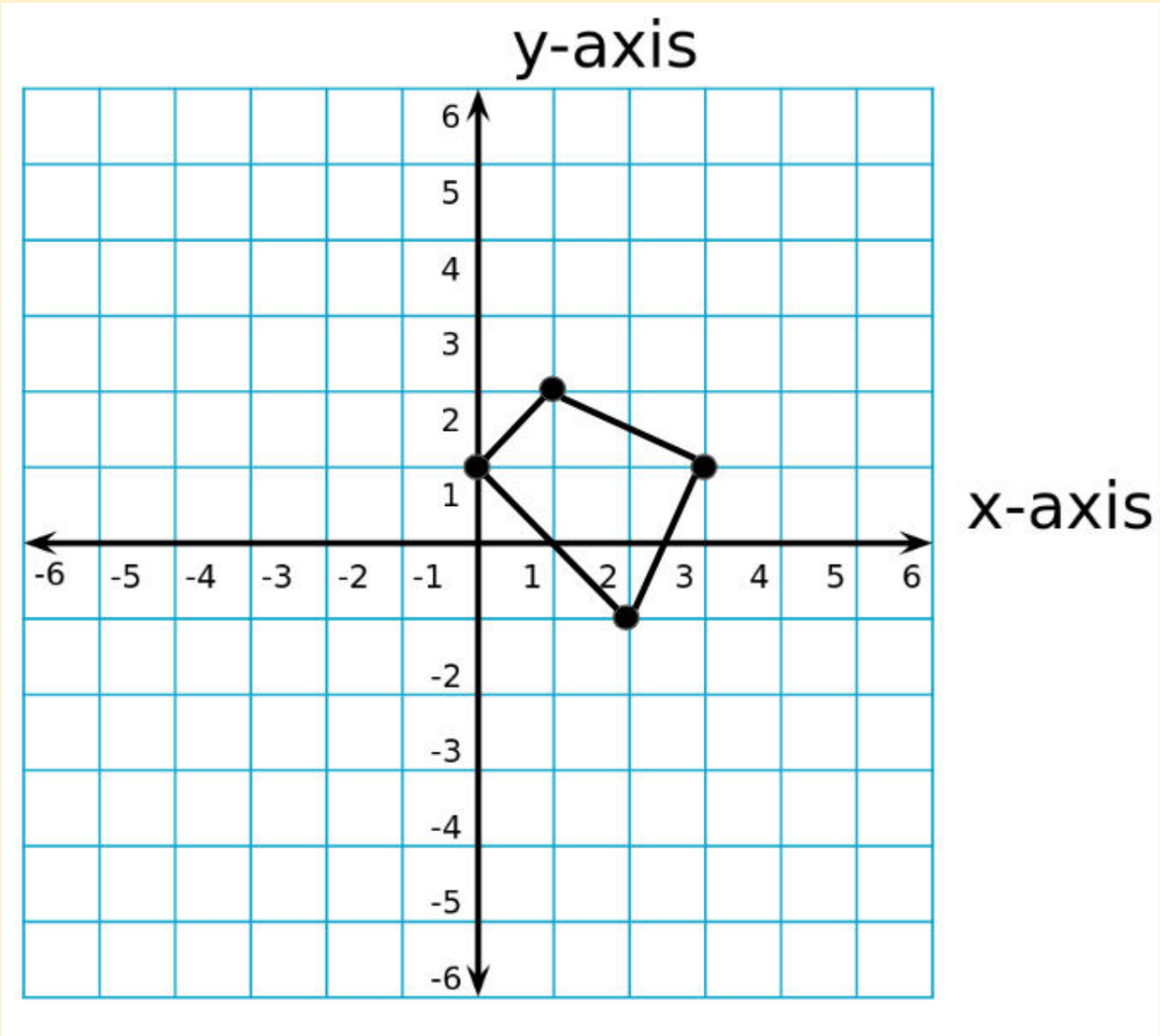
3. Did the shape change sizes?

   Yes No

4. So did the shape preserve congruence?

   Yes No

- **Trace the quadrilateral on your transparency using the Vis-a-Vis marker.**
- **Translate the quadrilateral vertically, 3 positive spaces, and tape in place.**
- **Answer the 4 questions below.**



Congruent or Not?

1. Did the side lengths change?

   Yes No

2. Did the angle measures change?

   Yes No

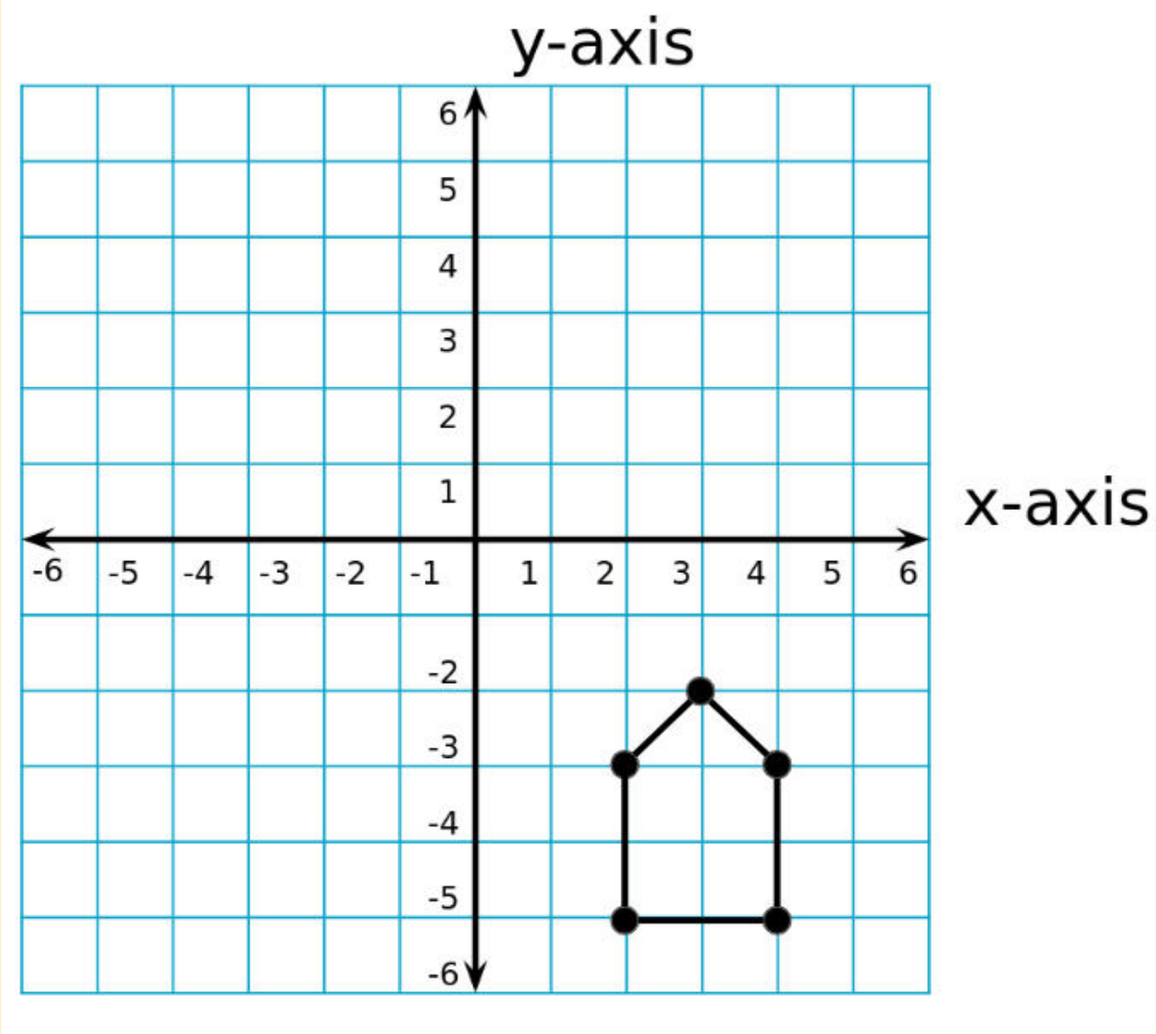
3. Did the shape change sizes?

   Yes No

4. So did the shape preserve congruence?

   Yes No

- **Trace the pentagon on your transparency using the Vis-a-Vis marker.**
- **Translate the pentagon horizontally, 3 negative spaces, and vertically, 5 positive spaces, and tape in place.**
- **Answer the 4 questions below.**



Congruent or Not?

1. Are the side lengths congruent?

   Yes No

2. Are the angles congruent?

   Yes No

3. Are the shapes congruent?

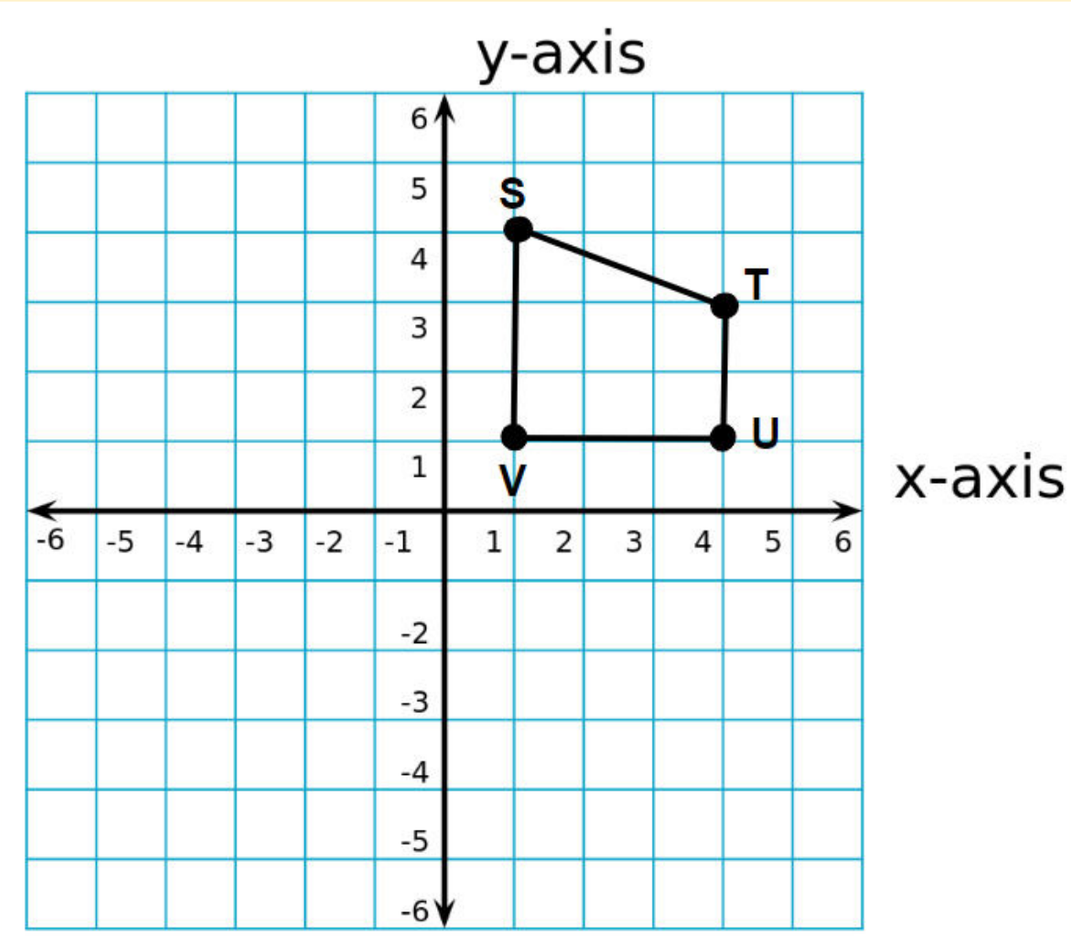
   Yes No

4. So did the shape preserve congruence?

   Yes No

- **Trace the trapezoid on your transparency using the Vis-a-Vis marker.**
- **Flip the trapezoid over the y-axis, tape in place and label the points as** S', T', U', V'

- **Answer the 4 questions below.**



Congruent or Not?

1. Did the side lengths change?

   Yes No

2. Did the angle measures change?

   Yes No

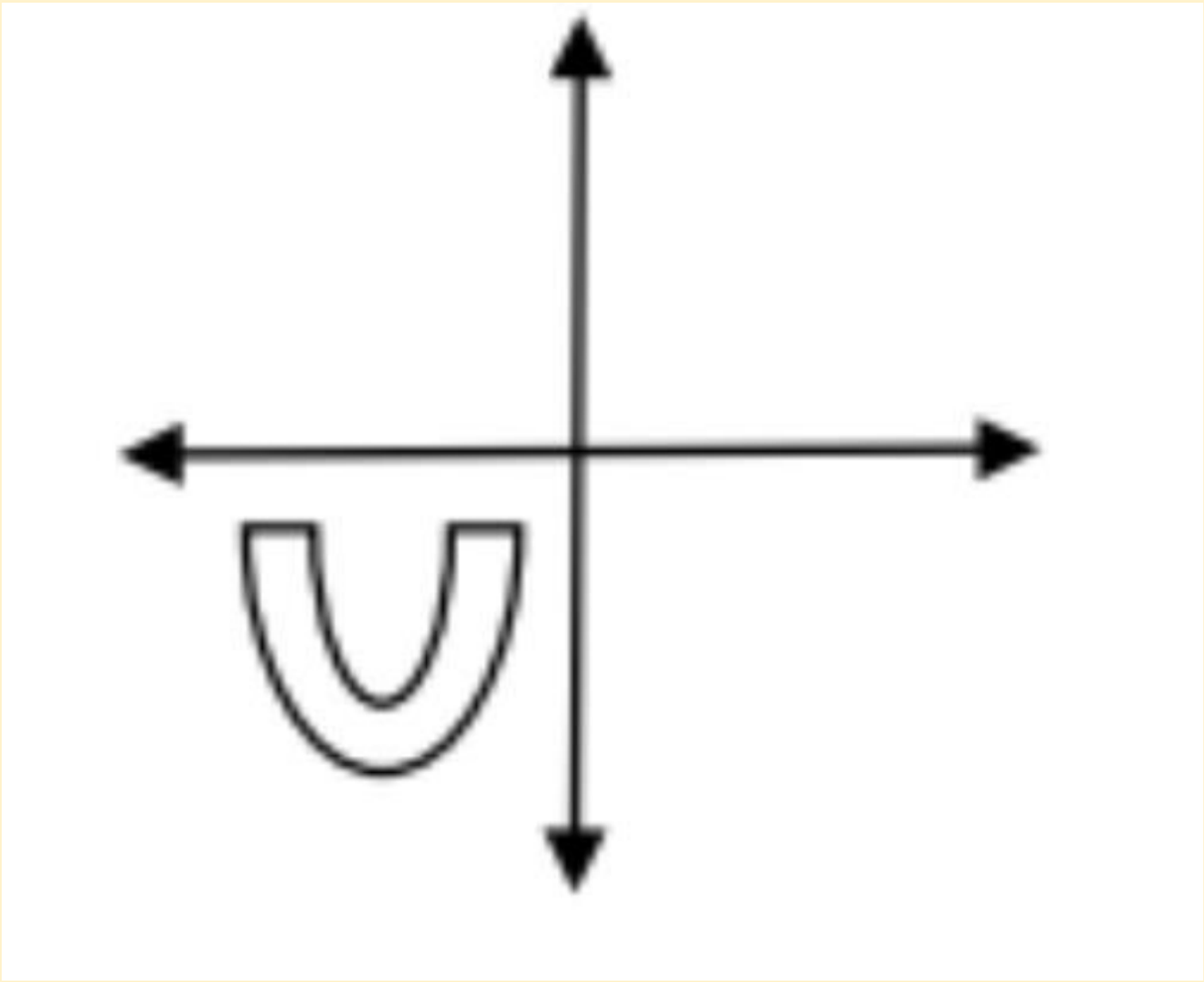
3. Did the shape change sizes?

   Yes No

4. So did the shape preserve congruence?

   Yes No

- **Trace the rainbow on your transparency using the Vis-a-Vis marker.**
- **Flip the rainbow over the x-axis, tape in place**
- **Answer the 4 questions below.**



Congruent or Not?

1. Did the side lengths change?

   Yes No

2. Did the angle measures change?

   Yes No

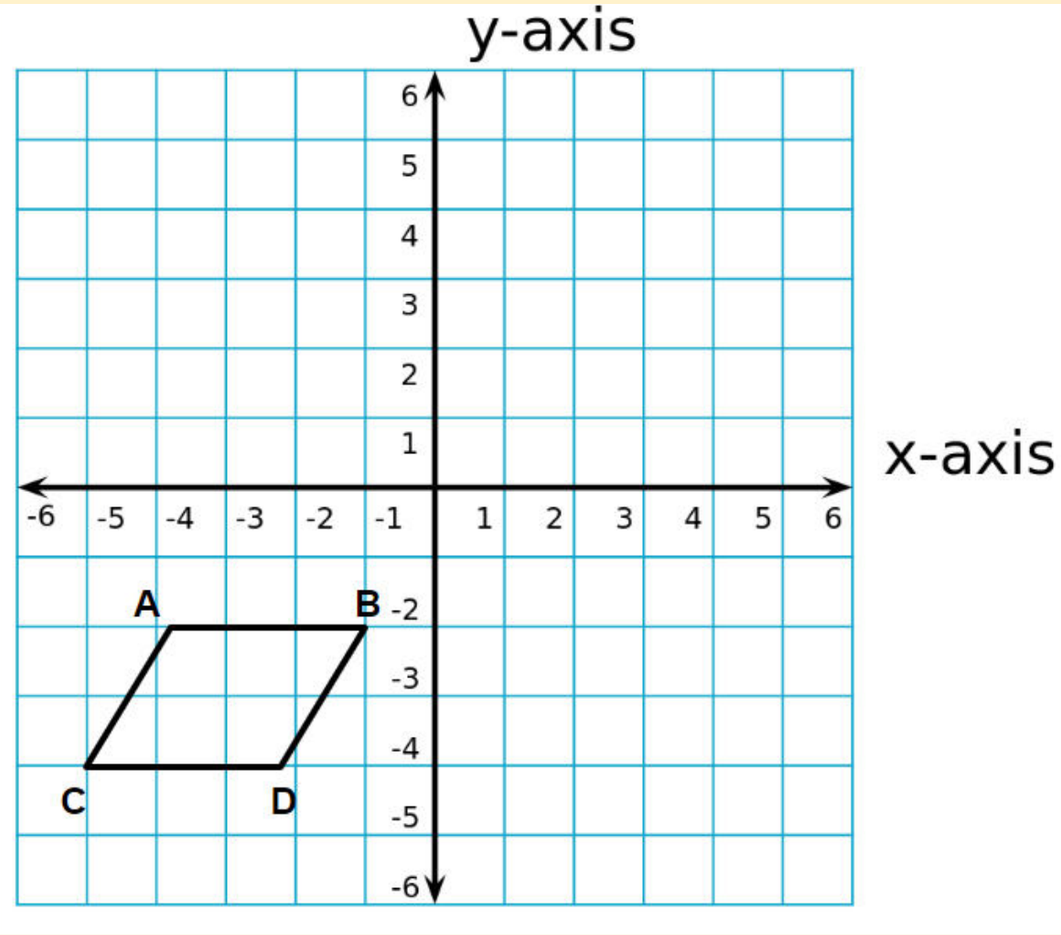
3. Did the shape change sizes?

   Yes No

4. So did the shape preserve congruence?

   Yes No

- **Trace the parallelogram on your transparency using the Vis-a-Vis marker.**
- **Flip the parallelogram over the y-axis, tape in place and label the points as** A', B', C', D'
- **Answer the 4 questions below.**



Congruent or Not?

1. Did the side lengths change?

   Yes No

2. Did the angle measures change?

   Yes No

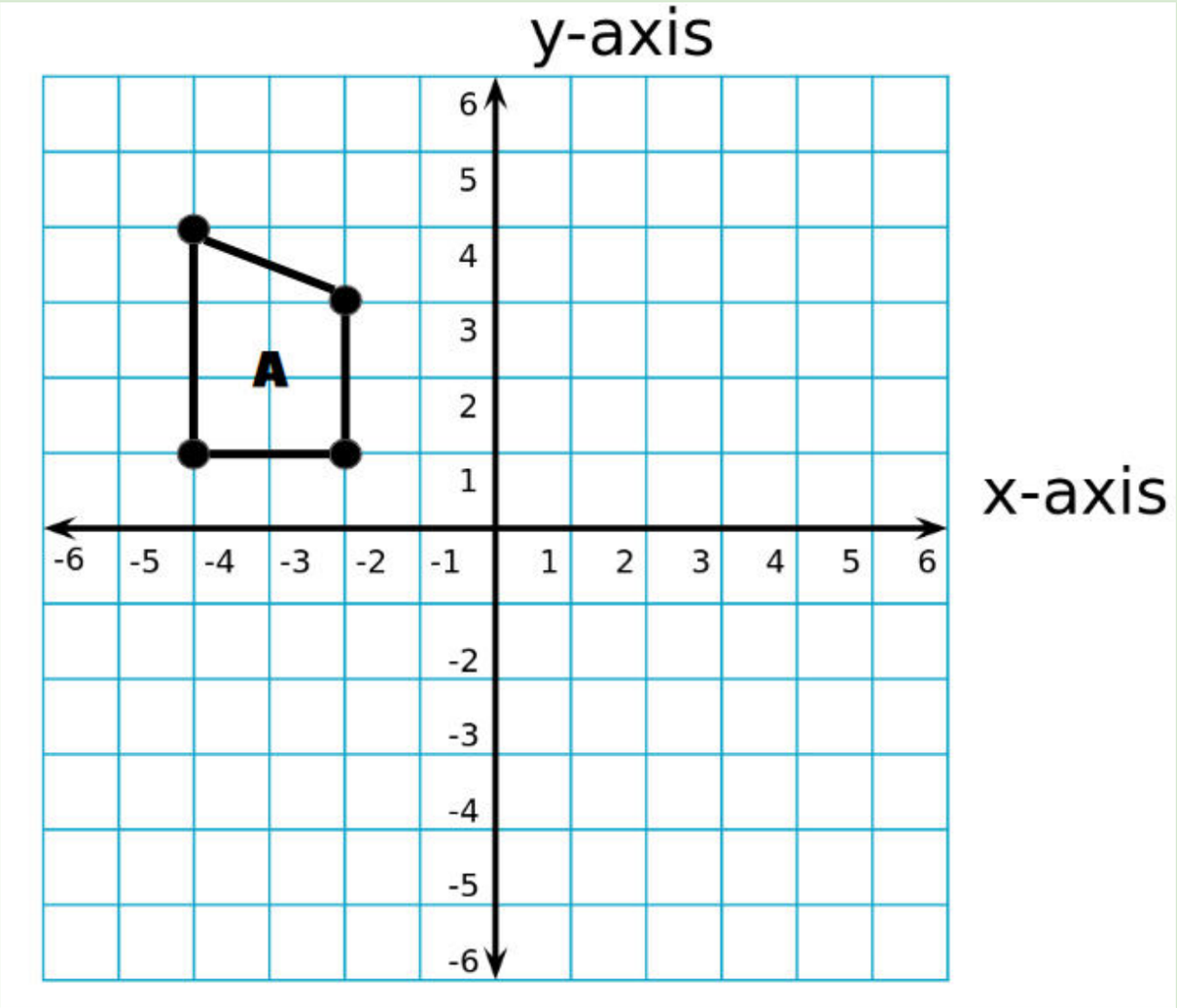
3. Did the shape change sizes?

   Yes No

4. So did the shape preserve congruence?

   Yes No

- **Trace the trapezoid A on your transparency using the Vis-a-Vis marker.**
- **Rotate the trapezoid, about the origin, 90 degrees clockwise, and tape in place.**
- **Answer the questions below.**



Congruent or Not?

1. Did the side lengths change?

   Yes No

2. Did the angle measurements change?

   Yes No

3. Did the shape change sizes?

   Yes No

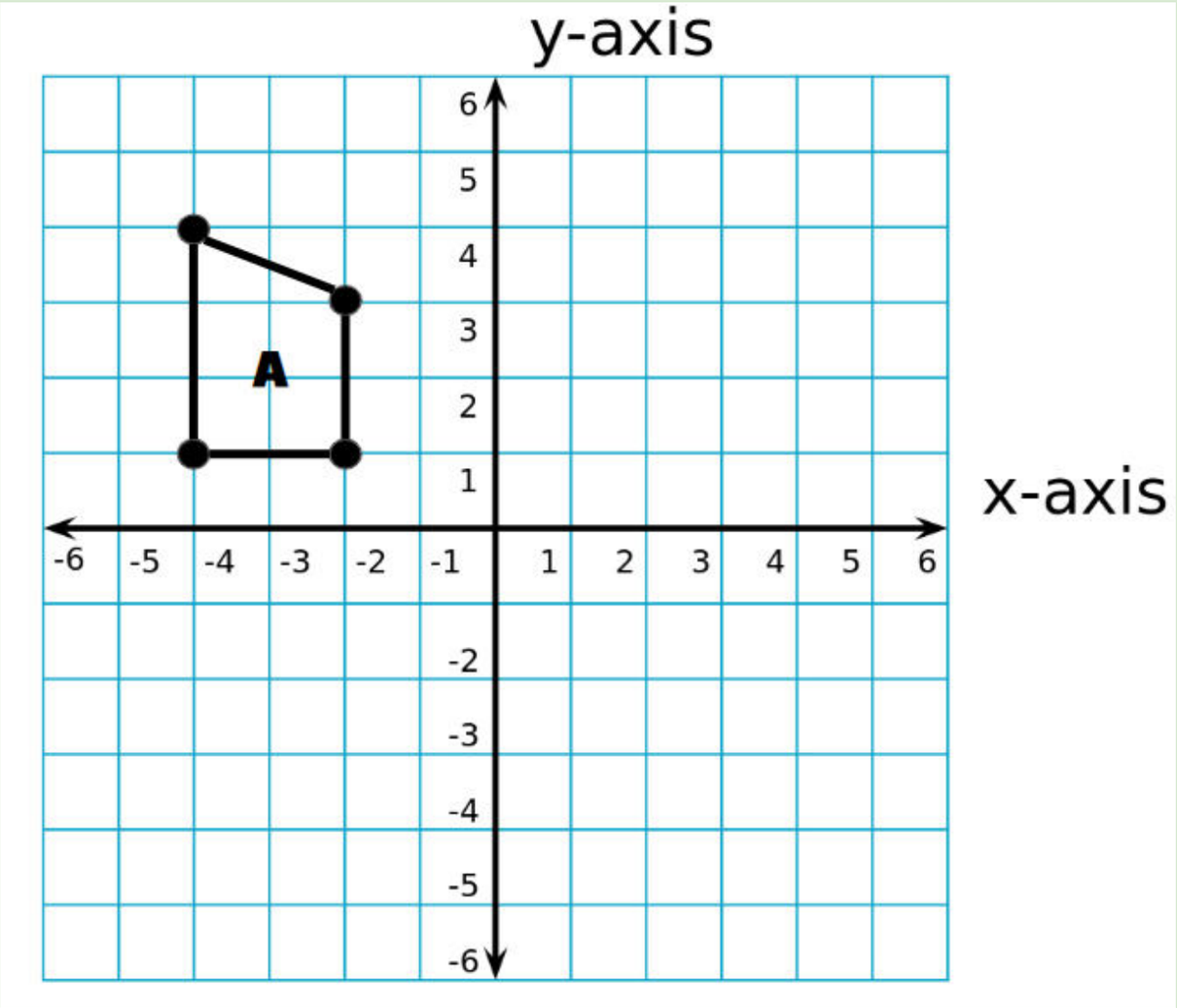
4. What Quadrant did the shape move to?

   Q1 Q2 Q3 Q4

5. Did the orientation of the shape change?

   Yes No

- **Trace the trapezoid A on your transparency using the Vis-a-Vis marker.**
- **Rotate the trapezoid, about the origin, 180 degrees clockwise, and tape in place.**
- **Answer the questions below.**



Congruent or Not?

1. Did the side lengths change?

   Yes No

2. Did the angle measurements change?

   Yes No

3. Did the shape change sizes?

   Yes No

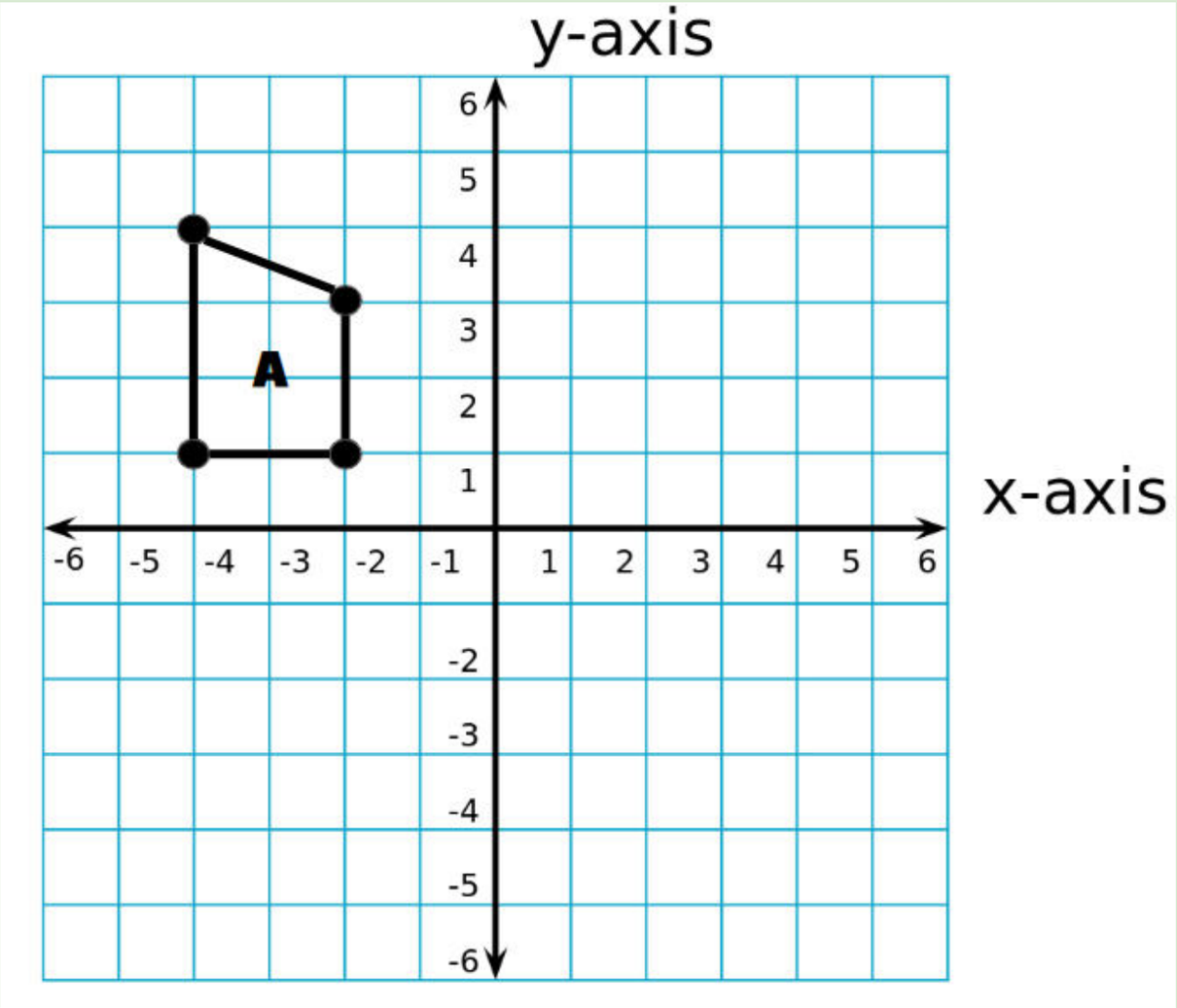
4. What Quadrant did the shape move to?

   Q1 Q2 Q3 Q4

5. Did the orientation of the shape change?

   Yes No

- **Trace the trapezoid A on your transparency using the Vis-a-Vis marker.**
- **Rotate the trapezoid, about the origin, 270 degrees clockwise, and tape in place.**
- **Answer the questions below.**



Congruent or Not?

1. Did the side lengths change?

   Yes No

2. Did the angle measurements change?

   Yes No

3. Did the shape change sizes?

   Yes No

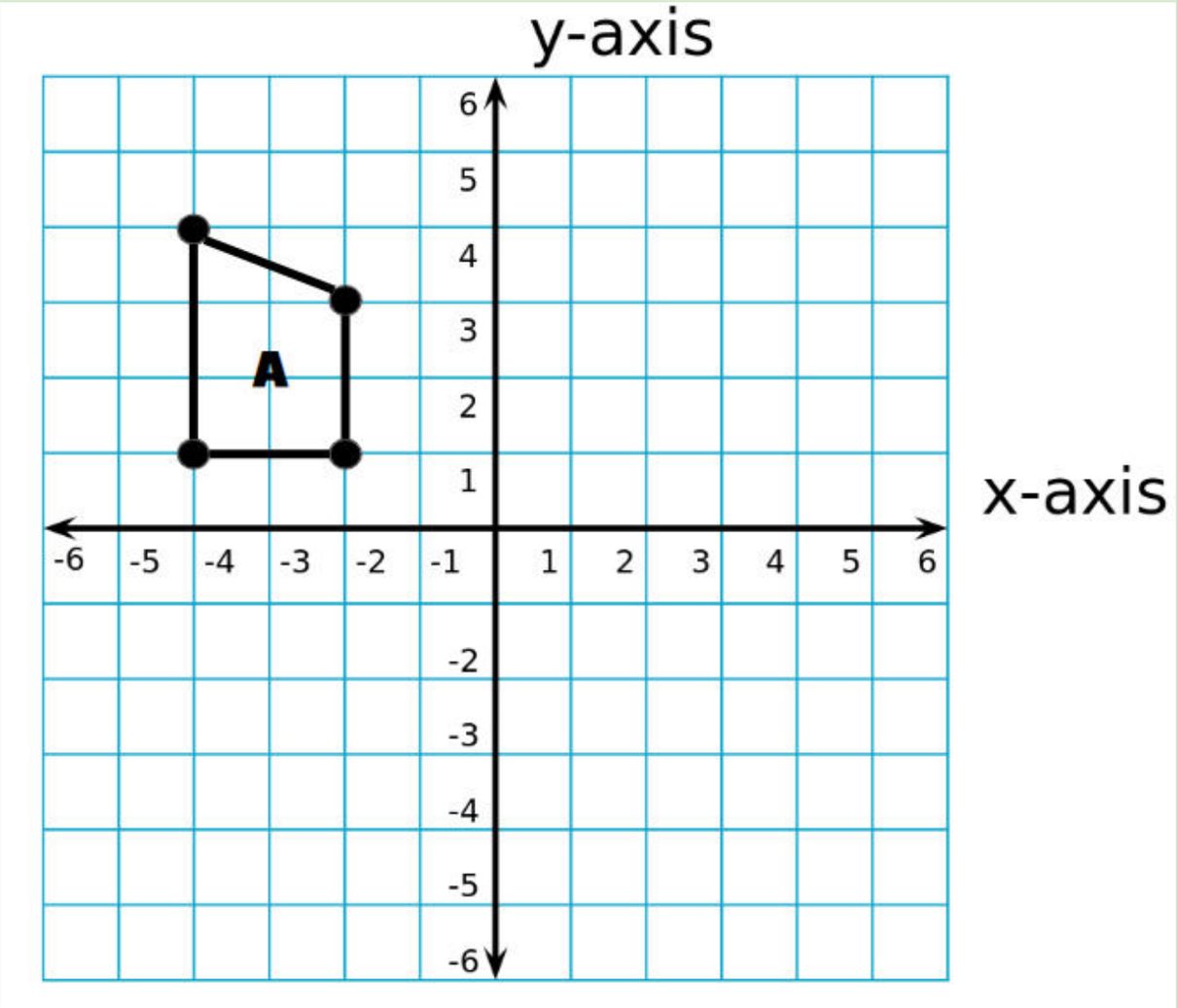
4. What Quadrant did the shape move to?

   Q1 Q2 Q3 Q4

5. Did the orientation of the shape change?

   Yes No

- **Trace the trapezoid A on your transparency using the Vis-a-Vis marker.**
- **Rotate the trapezoid, about the origin, 90 degrees counterclockwise, and tape in place.**
- **Answer the questions below.**



Congruent or Not?

1. Did the side lengths change?

   Yes No

2. Did the angle measurements change?

   Yes No

3. Did the shape change sizes?

   Yes No

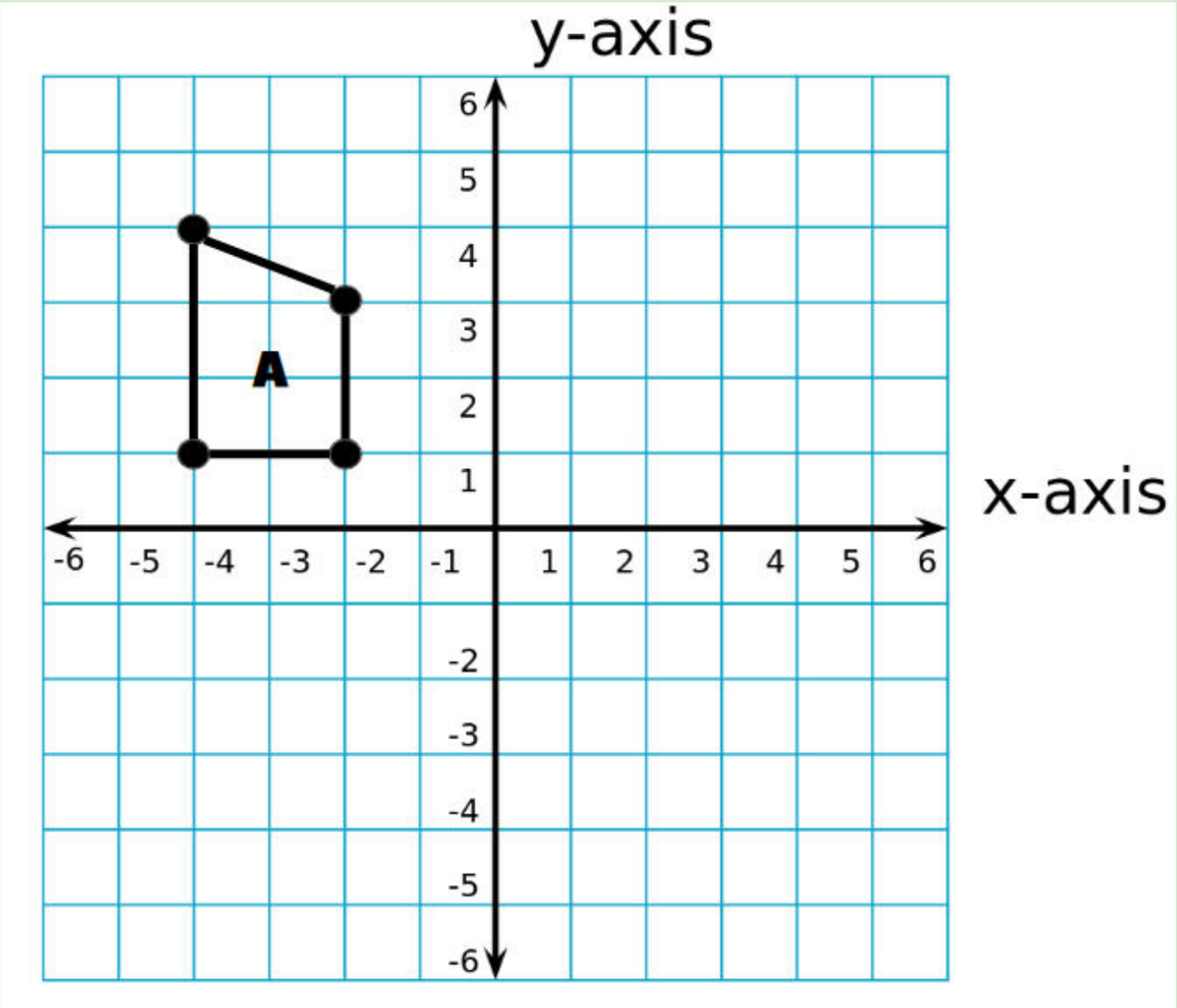
4. What Quadrant did the shape move to?

   Q1 Q2 Q3 Q4

5. Did the orientation of the shape change?

   Yes No

- **Trace the trapezoid A on your transparency using the Vis-a-Vis marker.**
- **Rotate the trapezoid, about the origin, 180 degrees counterclockwise, and tape in place.**
- **Answer the questions below.**



Congruent or Not?

1. Did the side lengths change?

   Yes No

2. Did the angle measurements change?

   Yes No

3. Did the shape change sizes?

   Yes No

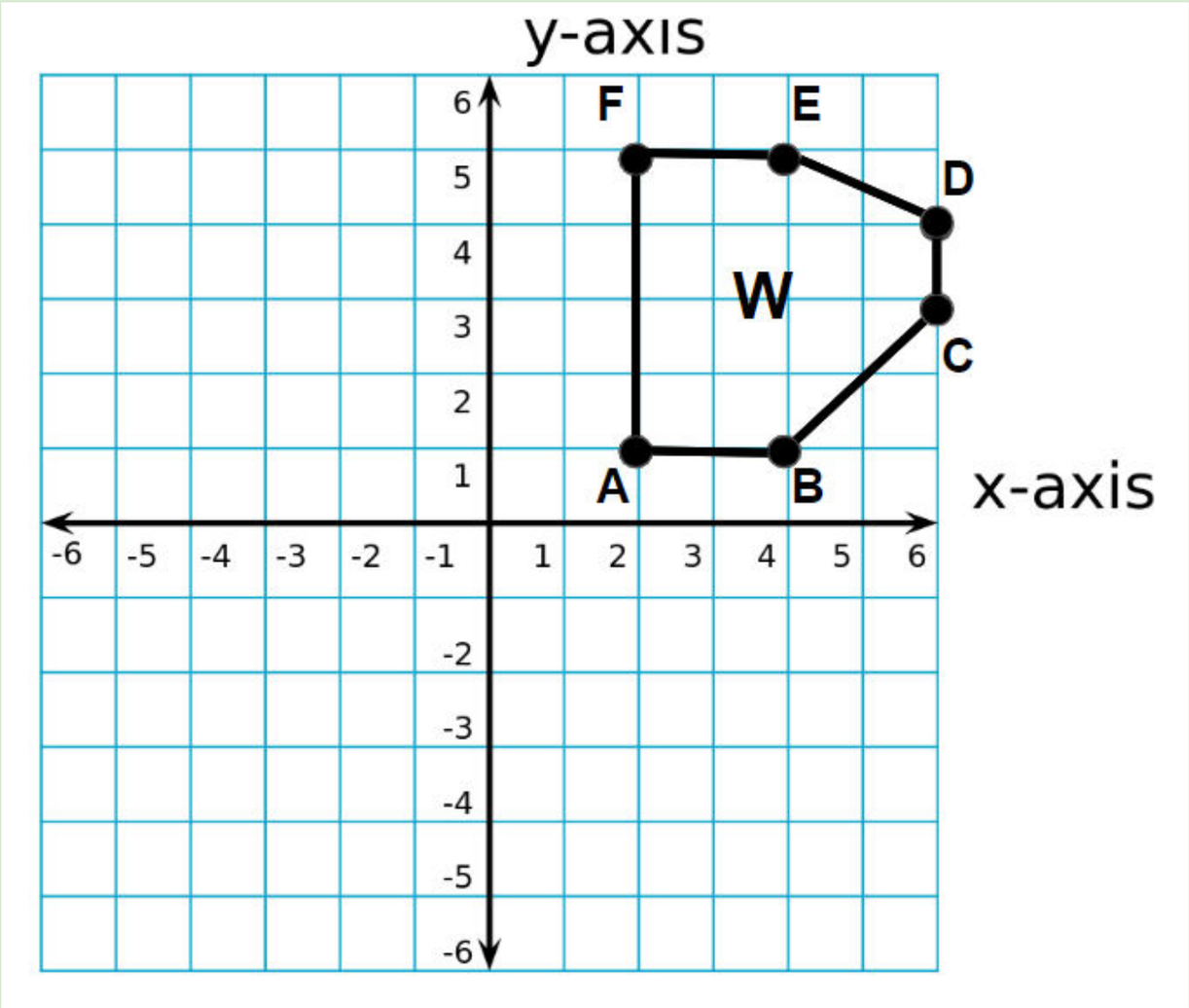
4. What Quadrant did the shape move to?

   Q1 Q2 Q3 Q4

5. Did the orientation of the shape change?

   Yes No

- **Trace polygon W on your transparency using the Vis-a-Vis marker. Label the vertices.**
- **Translate the polygon horizontally, 6 negative spaces, and tape in place.**
- **Answer the questions below.**

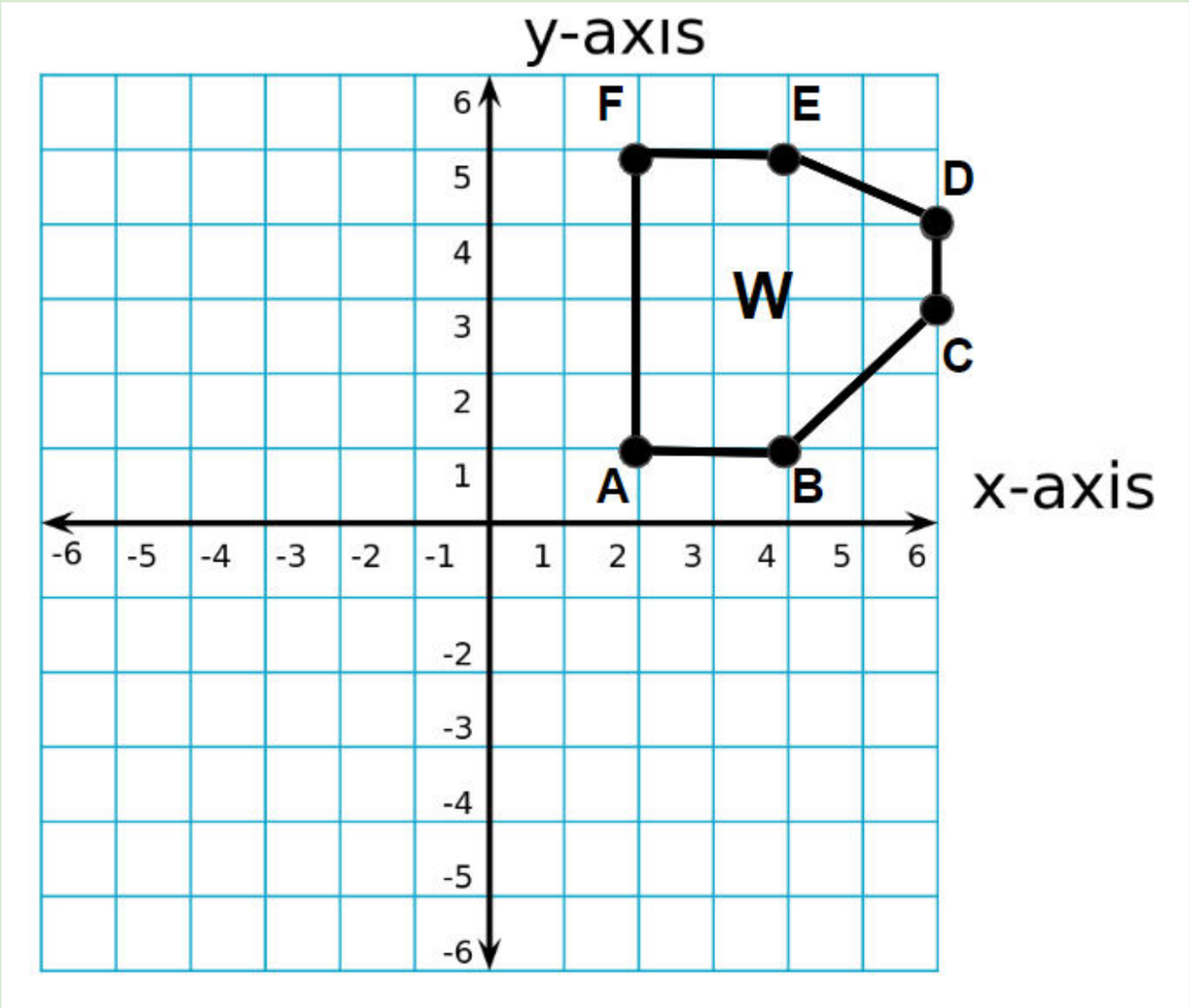


Did translating the figure change the size or shape?

Yes No

Coordinates of W	Coordinates of W'
A (2,1)	A'
B (4,1)	B'
C (6,3)	C'
D (6,4)	D'
E (4,5)	E'
F (2,5)	F'

- **Trace polygon W on your transparency using the Vis-a-Vis marker. Label the vertices.**
- **Reflect the polygon across the x-axis, and tape in place.**
- **Answer the questions below.**

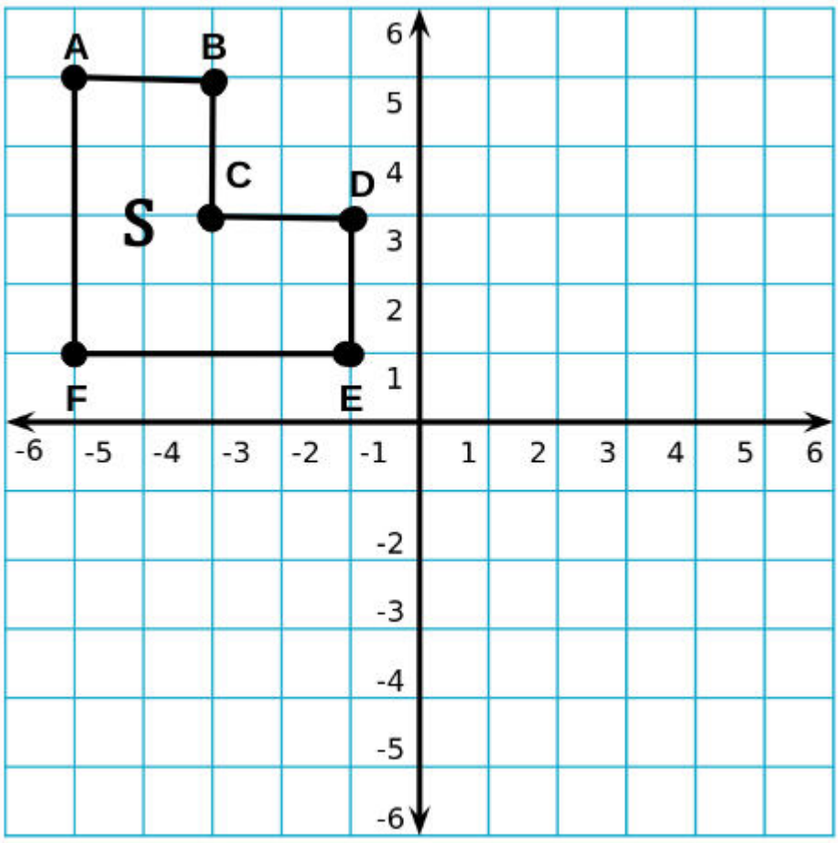


Did reflecting the figure change the size or shape?

Yes No

Coordinates of W	Coordinates of W'
A (2,1)	A'
B (4,1)	B'
C (6,3)	C'
D (6,4)	D'
E (4,5)	E'
F (2,5)	F'

- **Trace polygon S on your transparency using the Vis-a-Vis marker. LABEL the vertices.**
- **Translate the polygon horizontally 4 positive spaces, and tape in place.**
- **Fill in the table below.**

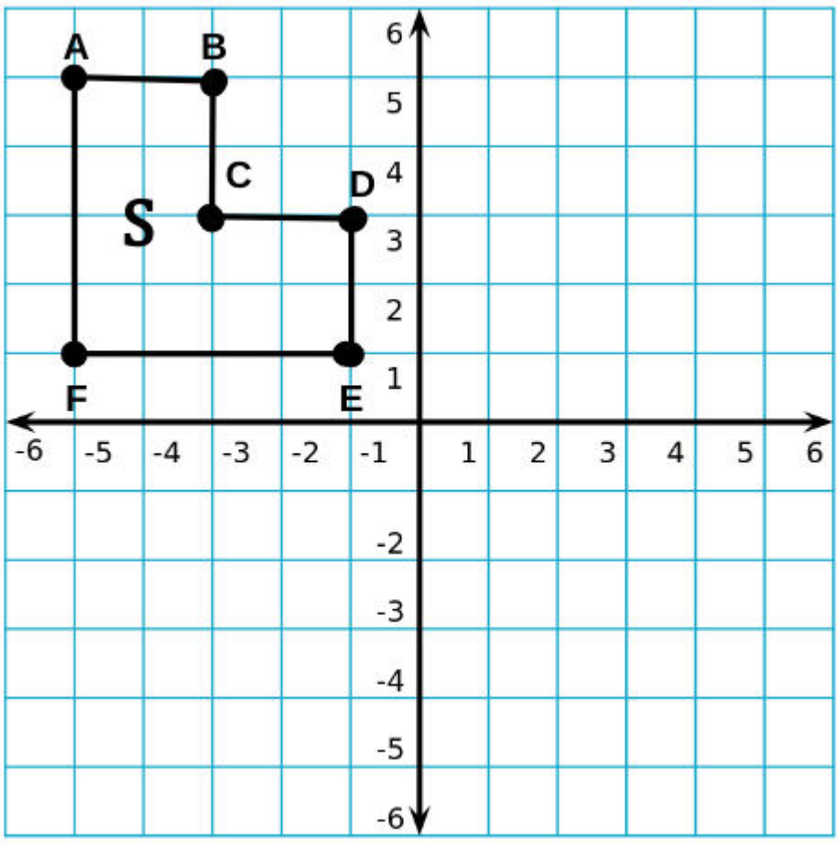


Coordinates of S	Coordinates of S'	How did the **x** values change?	How did the **y** values change?
A	A'		
B	B'		
C	C'		
D	D'		
E	E'		

Think It Out

Discuss with your group why the changes you demonstrated in the table occurred. Make sure all members of your group can explain.

- **Trace polygon S on your transparency using the Vis-a-Vis marker. LABEL the vertices.**
- **Translate the polygon vertically 4 negative spaces, and tape in place.**
- **Fill in the table below.**

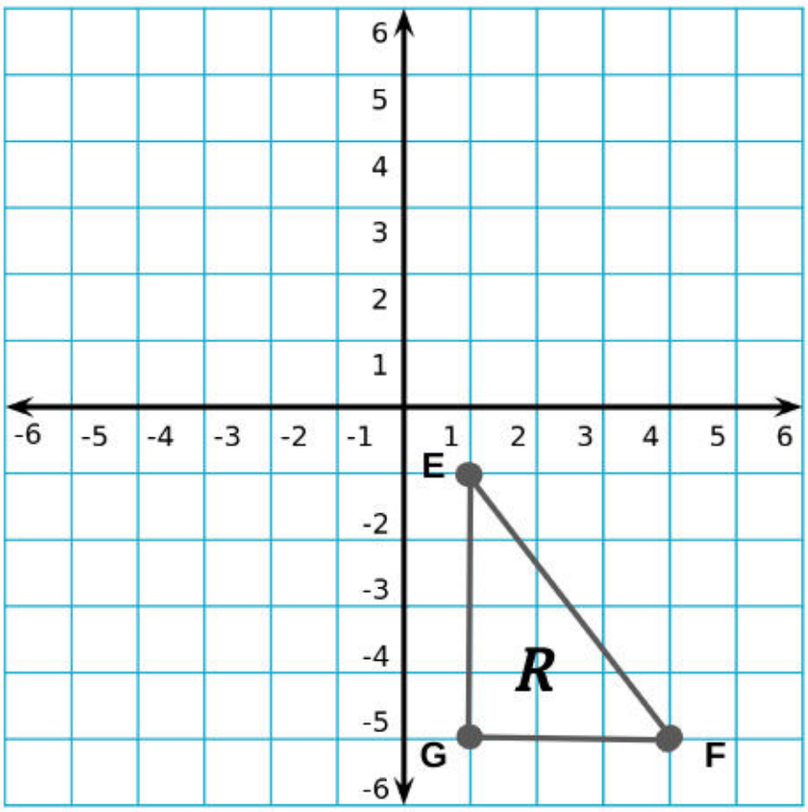


Coordinates of S	Coordinates of S'	How did the **x** values change?	How did the **y** values change?
A	A'		
B	B'		
C	C'		
D	D'		
E	E'		

Think It Out

Discuss with your group why the changes you demonstrated in the table occurred. Make sure all members of your group can explain.

- **Trace triangle S on your transparency using the Vis-a-Vis marker. LABEL the vertices.**
- **Translate the triangle horizontally 5 negative spaces and vertically 6 positive spaces and tape in place.**
- **Fill in the table below.**



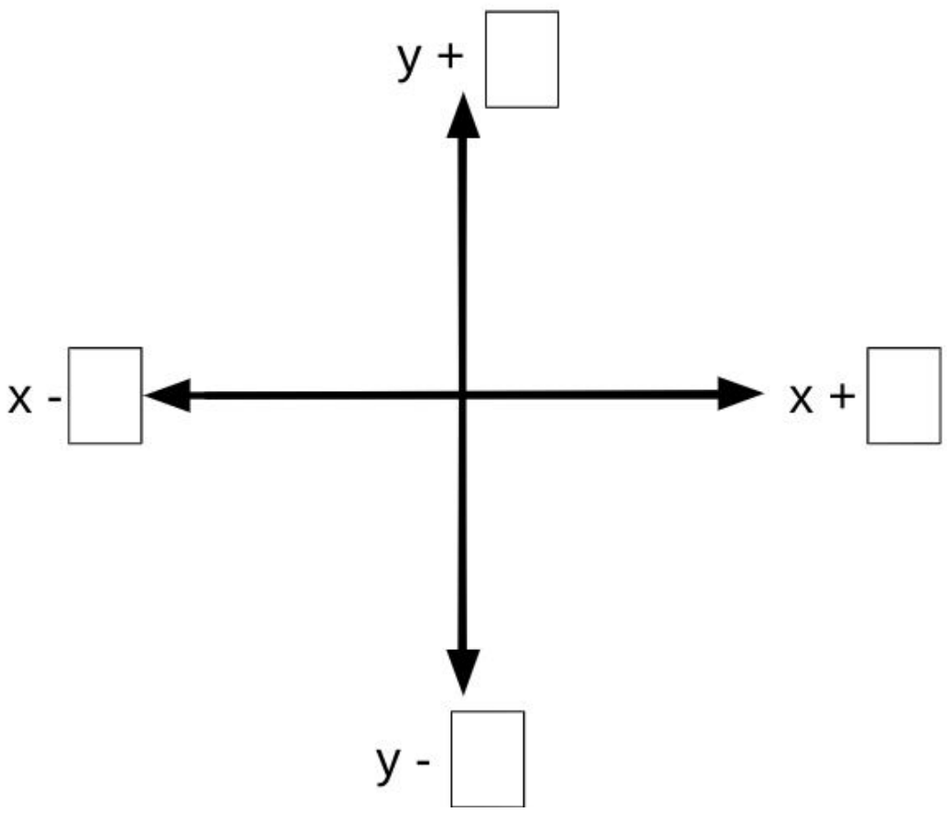
Coordinates of R	Coordinates of R'	How did the **x** values change?	How did the **y** values change?
E	E'		
F	F'		
G	G'		

Think It Out

Discuss with your group why the changes you demonstrated in the table occurred. Make sure all members of your group can explain.

- **Trapezoid *WXYZ* was translated 7 units down and 3 units left to create the trapezoid *W′X′Y′Z′*. Write the algebraic rule that describes this translation. EX:** $(x,y) \rightarrow (x + \_\_, y + \_\_)$

Graphic Organizer



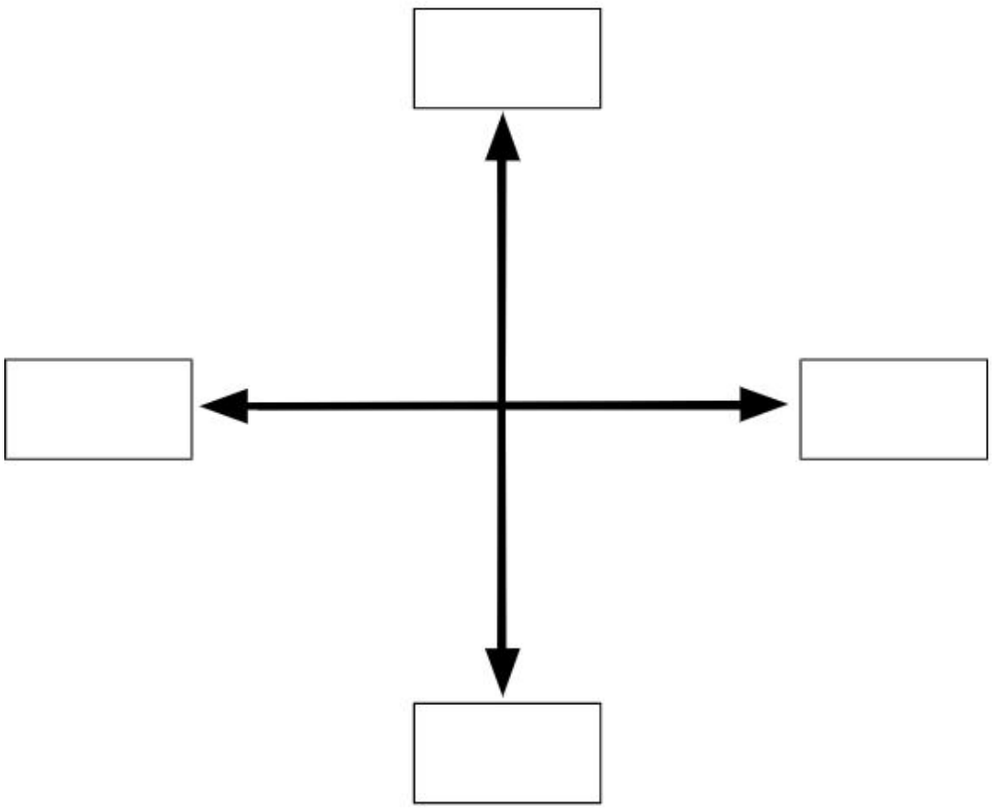
RULE:

Think It Out

Discuss with your group which words helped you identify the movement of the translation and how those words helped write the algebraic rule. Make sure all members of your group can explain.

- **Trapezoid *PQRS* was translated 5 units right and 7 units down to create the trapezoid *P′Q′R′S′*. Write the algebraic rule that describes this translation. EX:** $(x,y) \rightarrow (x + \_\_, y + \_\_)$

Graphic Organizer



RULE:

Think It Out

Discuss with your group which words helped you identify the movement of the translation and how those words helped write the algebraic rule. Make sure all members of your group can explain.

UNIT

TITLE:

Page #	Page Title