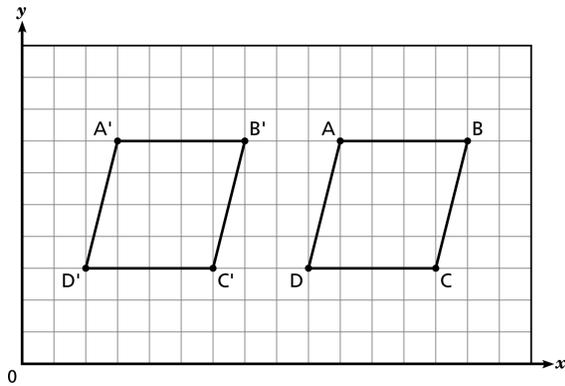


Translation and Reflection

Name: _____

Date: _____

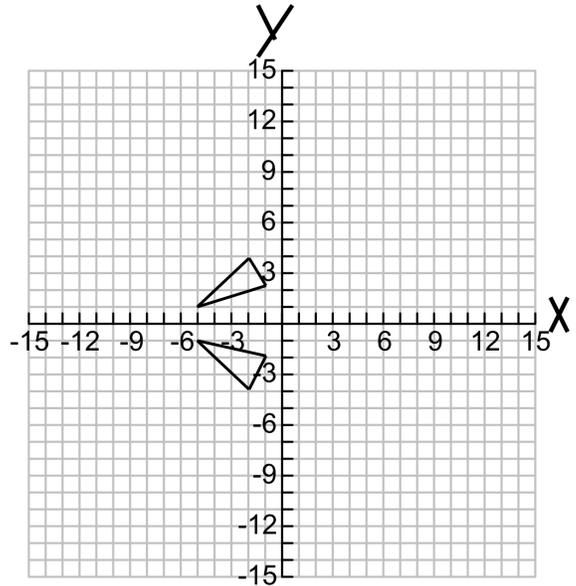
1. Parallelogram $ABCD$ was translated to parallelogram $A'B'C'D'$.



How many units and in which direction were the x -coordinates of parallelogram $ABCD$ moved?

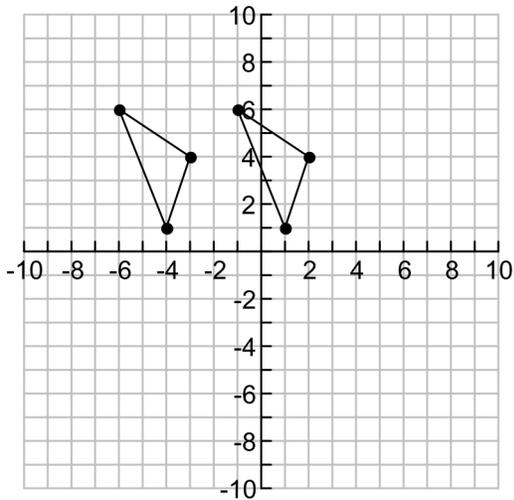
- A. 3 units to the right B. 3 units to the left
 C. 7 units to the right D. 7 units to the left

2. The vertices of triangle FGH are $F(-5, 1)$, $G(-2, 4)$, and $H(-1, 2)$. The vertices of triangle $F'G'H'$ are $F'(-5, -1)$, $G'(-2, -4)$, $H'(-1, -2)$.

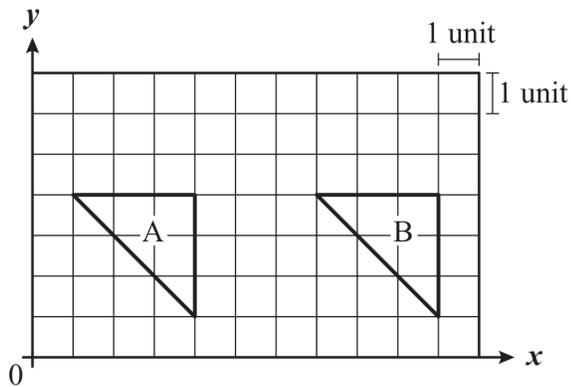


Identify the transformation of triangle FGH to triangle $F'G'H'$

3. Describe the transformation (translations, rotations, reflections, or dilations)

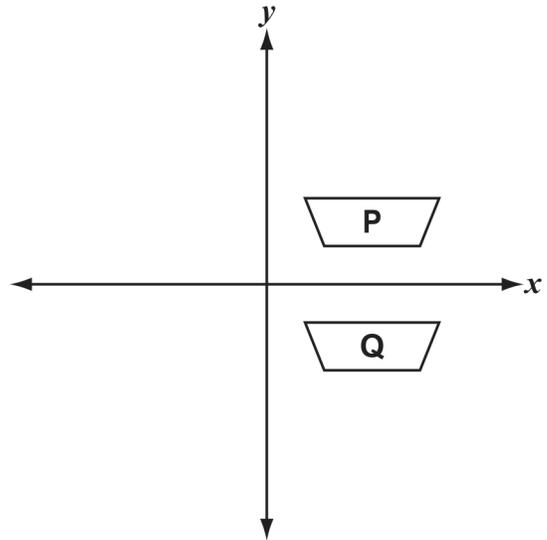


4. Which of the following describes the transformation from figure A to figure B on the grid below?



- A. reflection across the x -axis
- B. reflection across the y -axis
- C. rotation about point $(0, 0)$
- D. translation 6 units right

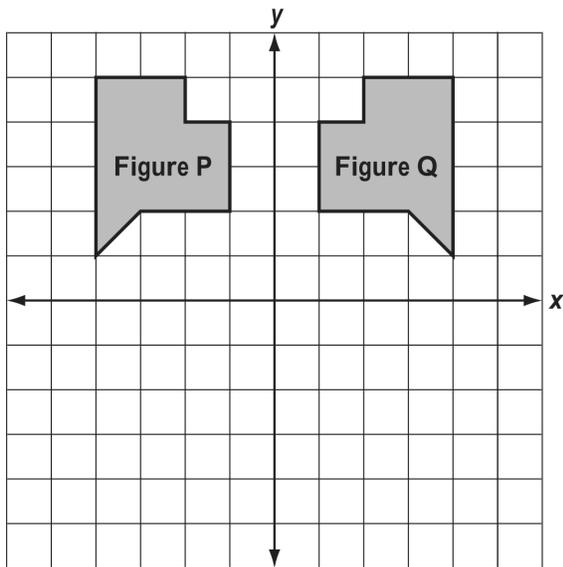
5. Karin used a single transformation of trapezoid P to create the image Q on the coordinate plane shown below.



Which of the following could describe the transformation that Karin used?

- A. reflection over the x -axis
- B. reflection over the y -axis
- C. translation down
- D. translation up

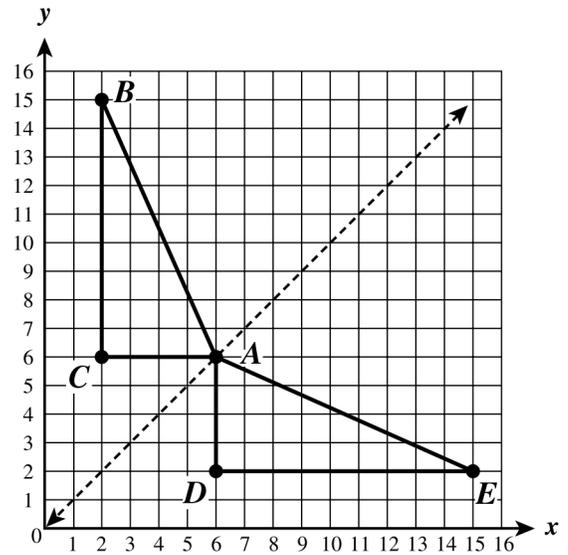
6. Lainey drew Figure P on a coordinate grid. Then she did a one-step transformation of Figure P to draw Figure Q, as shown below.



Which of the following one-step transformations of Figure P could Lainey have done to draw Figure Q?

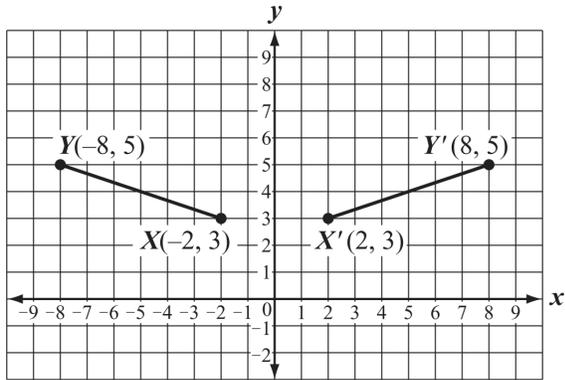
- A. reflection over the x -axis
- B. reflection over the y -axis
- C. rotation 180° clockwise
- D. translation to the right

7. Right triangles ABC and AED are shown on the coordinate grid below.



Which single transformation, with respect to the line $y = x$, maps $\triangle ABC \rightarrow \triangle AED$?

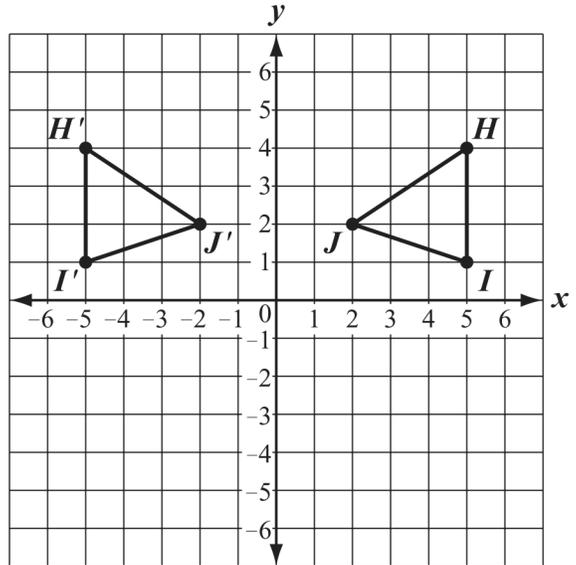
8. The diagram below shows \overline{XY} and its image $\overline{X'Y'}$ after a single transformation.



Which of the following describes the transformation?

- A. rotation 90° clockwise about the origin
- B. translation 4 units to the right
- C. reflection over the x -axis
- D. reflection over the y -axis

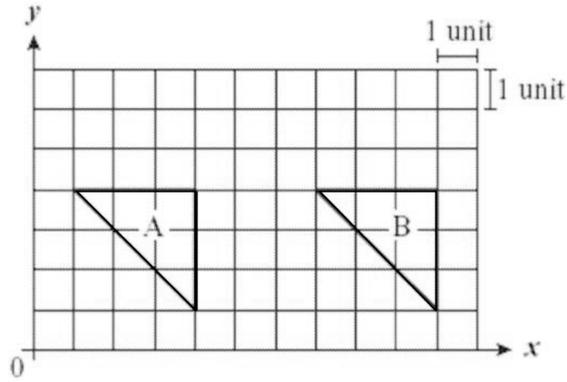
9. The diagram below shows $\triangle HIJ$ and its image $\triangle H'I'J'$ after a single transformation.



Which of the following describes the transformation?

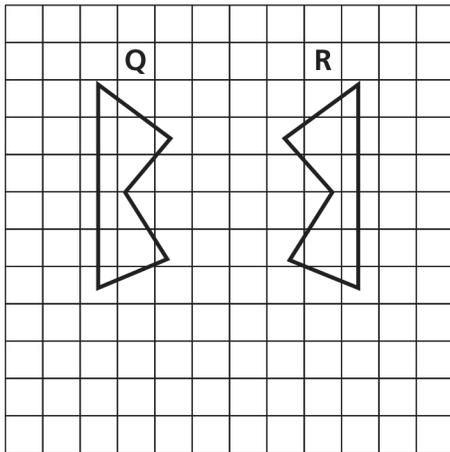
- A. reflection over the x -axis
- B. reflection over the y -axis
- C. rotation 90° clockwise about the origin
- D. rotation 180° clockwise about the origin

10. Which of the following describes the transformation from figure A to figure B on the grid below?



- A. Translation 6 units to the right
- B. Rotation about the point $(0, 0)$
- C. Reflection across the x -axis
- D. Reflection across the y -axis

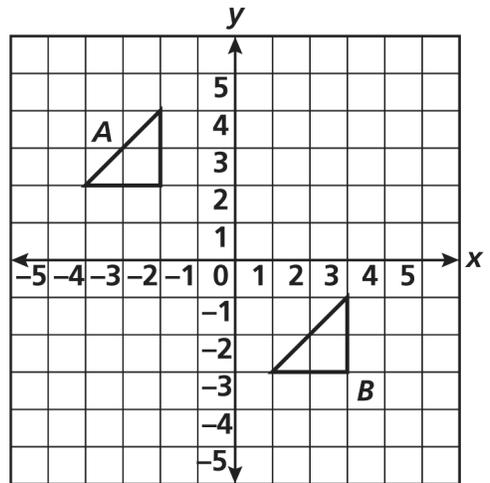
11. Alyce used a single transformation of figure Q to create figure R.



Which transformation did Alyce use?

- A. Dilation
- B. Reflection
- C. Rotation
- D. Translation

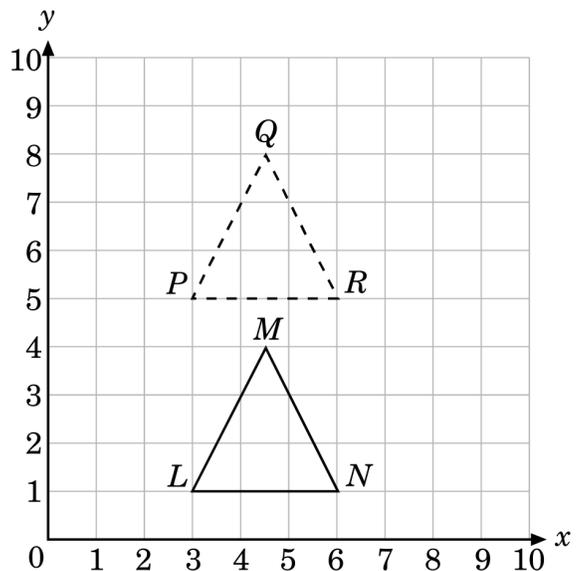
12. Renee drew triangle A on a coordinate grid. Then she used one transformation of triangle A to create triangle B, as shown below.



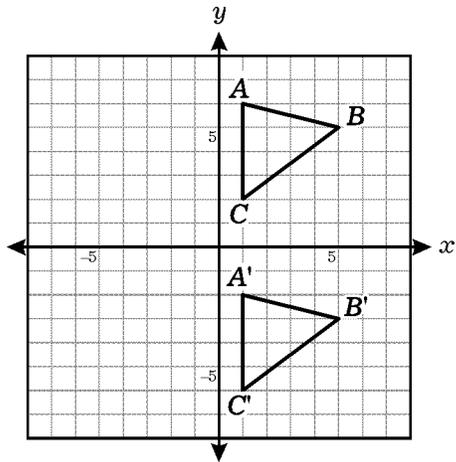
Which transformation did Renee use to create triangle B?

- A. Dilation
- B. Rotation
- C. Reflection
- D. Translation

13. What kind of position change for $\triangle LMN$ produced $\triangle PQR$?

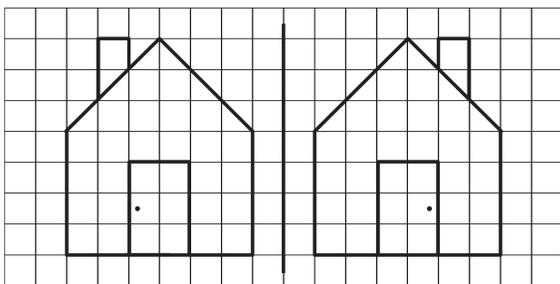


14. Which choice *best* describes the transformation shown in the drawing?



- A. reflection over x -axis
- B. reflection over y -axis
- C. translation so (x, y) maps to $(x - 8, y)$
- D. translation so (x, y) maps to $(x, y - 8)$

15. The grid shows two shapes.

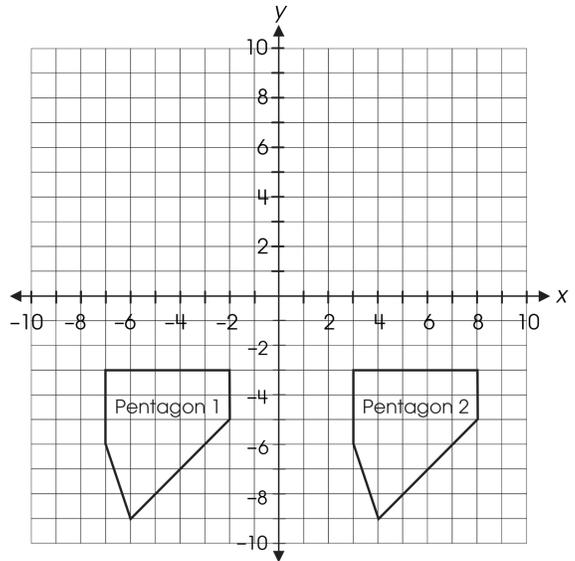


Shape 1

Shape 2

What transformation changed shape 1 to shape 2?

16. A transformation of pentagon 1 resulted in pentagon 2.



Which transformation was used?

- A. a reflection across the y -axis
- B. a translation 10 units to the right
- C. a translation 5 units to the right
- D. a reflection across the x -axis