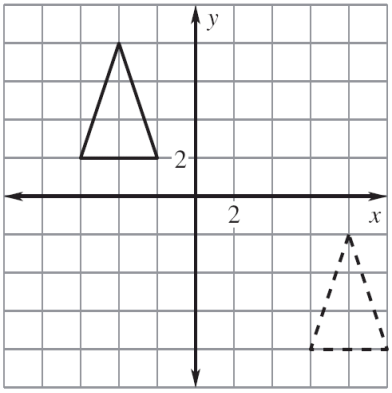
Name _____ **Date** _____

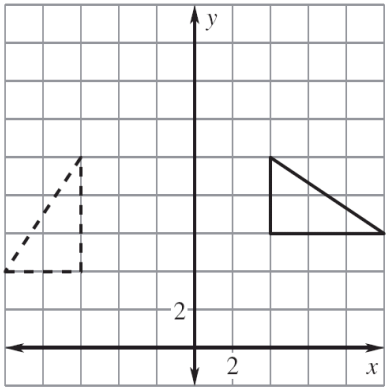
Assignment 37 LESSON 4.9

Name the type of transformation shown.

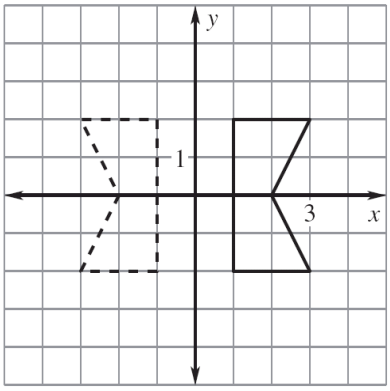
1.



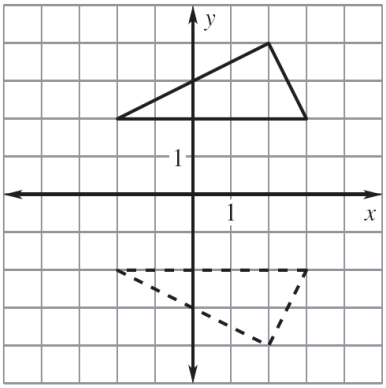
2.



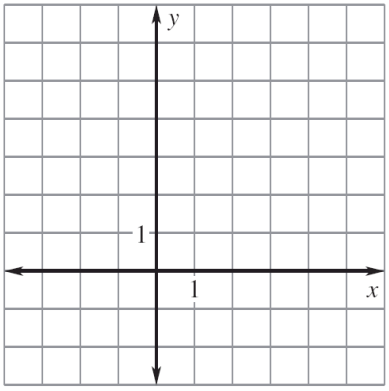
3.



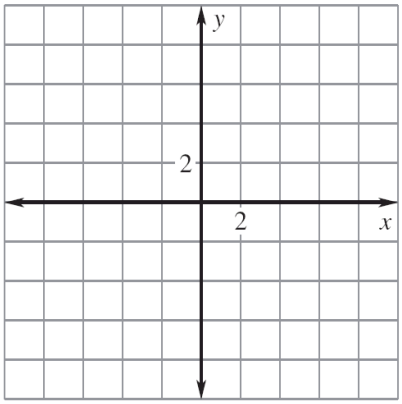
4.



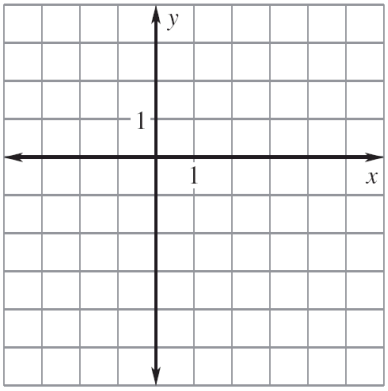
5. Figure *ABC* has vertices *A*(–3, 3), *B* (1, –1), and *C*(0, 5). Sketch *ABC* and draw its image after the translation $(x, y) \rightarrow (x + 4, y + 2)$.



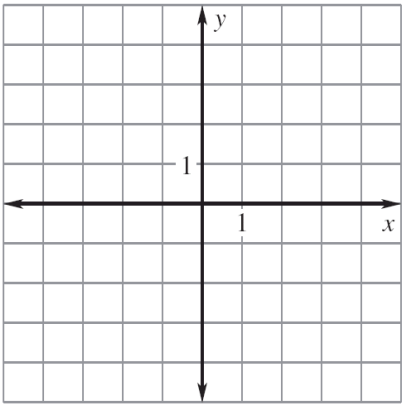
6. Figure *ABC* has vertices *A*(4, 2), *B*(2, 6), and *C*(6, 6). Sketch *ABC* and draw its image after the translation $(x, y) \rightarrow (x – 6, y – 3)$.



7. Figure *ABCD* has vertices *A*(0, –5), *B*(0, –2), *C*(–3, 2), and *D*(–2, –4). Sketch *ABCD* and draw its image after the translation $(x, y) \rightarrow (x + 5, y + 1)$.



8. Figure *ABCD* has vertices *A* (3, –4), *B* (4,–1), *C* (3,–2),and *D* (l, –3). Sketch *ABCD* and draw its image after the translation $(x, y) \rightarrow (x - 6, y + 5)$.



Use coordinate notation to describe the translation.

9. 5 units to the right, 3 units down

10. 9 units to the left, 7 units up

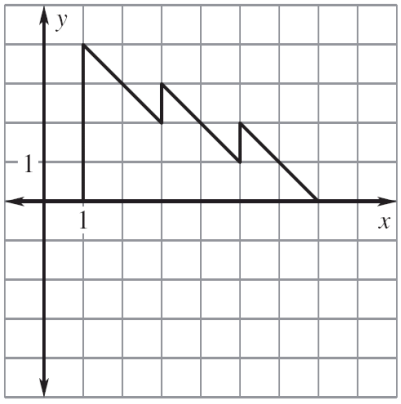
Complete the statement using the description of the translation. In the description, points (2, 3) and (4, 2) are two vertices of a triangle.

11. If (2, 3) translates to (10, –4), then (4, 2) translates to __?__.

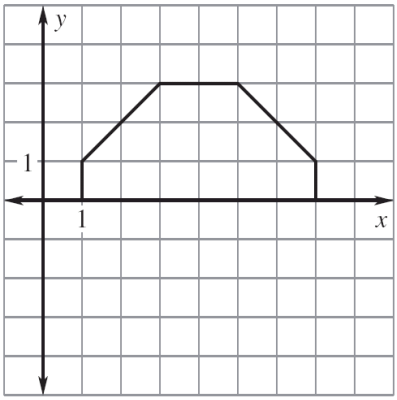
12. If (2, 3) translates to (–1, 8), then (4, 2) translates to __?__.

Use a reflection in the *x*-axis to draw the other half of the figure.

13.

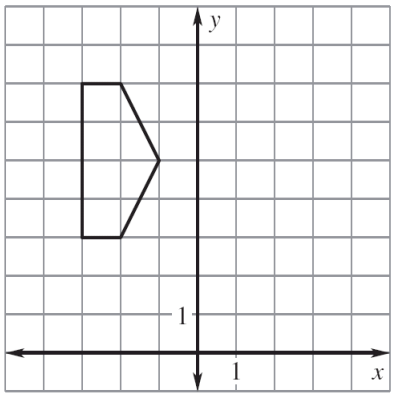


14.



Use a reflection in the *y*-axis to draw the other half of the figure.

15.



16.