

Name \_\_\_\_\_

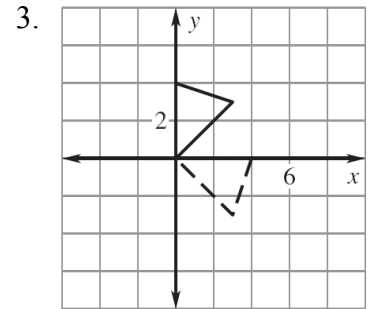
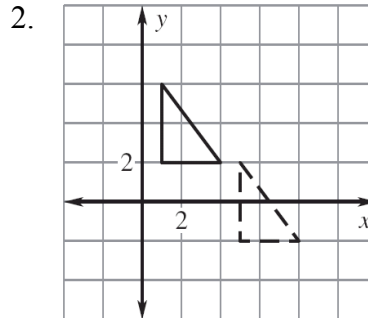
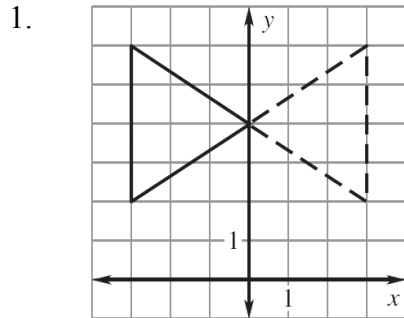
Date \_\_\_\_\_

**LESSON 4.8**

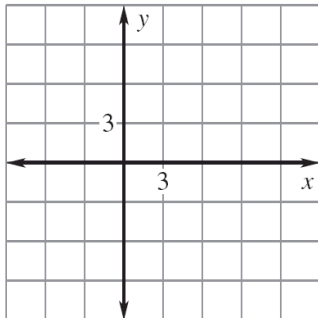
**Practice B**

For use with pages 271-279

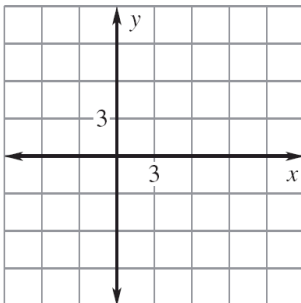
**Name the type of transformation shown.**



4. Figure  $ABCD$  has vertices  $A(3, -1)$ ,  $B(6, -2)$ ,  $C(5, 3)$ , and  $D(0, 4)$ . Sketch  $ABCD$  and draw its image after the translation  $(x, y) \rightarrow (x - 3, y + 2)$ .



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

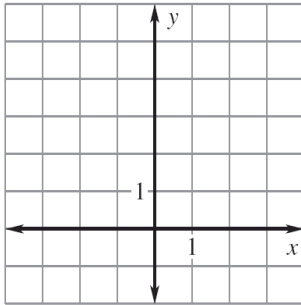


**Use coordinate notation to describe the translation.**

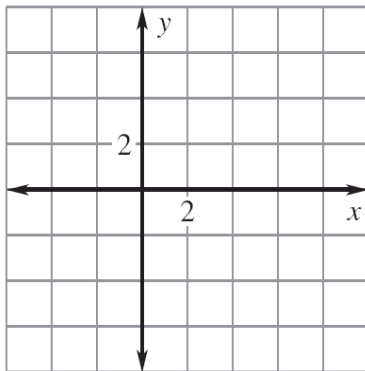
6. 3 units to the right, 5 units down
7. 7 units to the left, 2 units down
8. 4 units to the left, 6 units up
9. 1 unit to the right, 8 units up

**Use the coordinates to graph  $\overline{AB}$  and  $\overline{CD}$ . Tell whether  $\overline{CD}$  is a rotation of  $\overline{AB}$  about the origin. If so, give the angle and direction of rotation.**

10.  $A(-2,5)$ ,  $B(-2,0)$ ,  $C(0, 1)$ ,  $D(3, 1)$



11.  $A(1, 4)$ ,  $B(4, 1)$ ,  $C(1, -4)$ ,  $D(4, -1)$



**Complete the statement using the description of the translation. In the description, points  $(2, 0)$  and  $(3, 4)$  are two vertices of a triangle.**

12. If  $(2, 0)$  translates to  $(4, 1)$ , then  $(3, 4)$  translates to \_\_\_\_\_.
13. If  $(2, 0)$  translates to  $(-2, -1)$ , then  $(3,4)$  translates to \_\_\_\_\_.