LESSON 7.5

NAME _____ DATE _____

Available as a transparency

WARM-UP EXERCISES

For use before Lesson 7.5, pages 429–436

$\overline{PQ}$ has endpoints $P(-4, -4)$ and $Q(-1, -3)$. Find the coordinates of P' and Q' after each translation.

1. $(x, y) \rightarrow (x, y + 3)$

2. $(x, y) \rightarrow (x + 1, y - 1)$

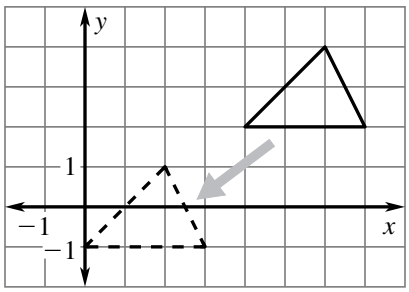
3. Find the coordinates of the endpoints of $\overline{P'Q'}$ after $\overline{PQ}$ is rotated 180° about the origin.

4. Find the coordinates of $\overline{P'Q'}$ after $\overline{PQ}$ is reflected in the x-axis.

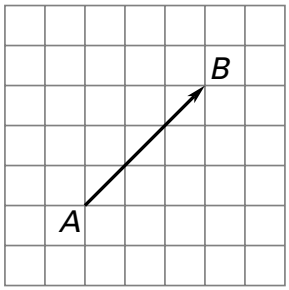
DAILY HOMEWORK QUIZ

For use after Lesson 7.4, pages 421–428

1. Describe the translation using
(a) coordinate notation and
(b) a vector in component form.



2. Name the vector and write its component form.



3. Consider the translation that is defined by the coordinate notation $(x, y) \rightarrow (x + 4, y - 1)$.

a. What is the image of $(2, 5)$?

b. What is the preimage of $(-1, 3)$?

4. The vertices of $\triangle ABC$ are $A(-5, 3)$, $B(4, 2)$, and $C(-1, -1)$. Name the vector that describes a translation such that $A'(-2, -1)$, $B'(7, -2)$, and $C'(2, -5)$.