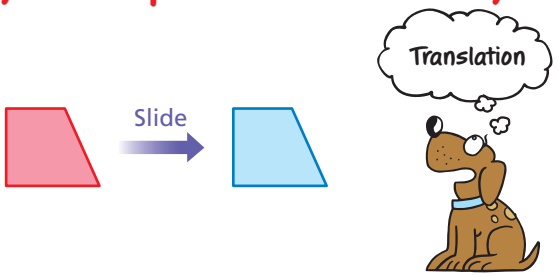
REVIEW: Translations

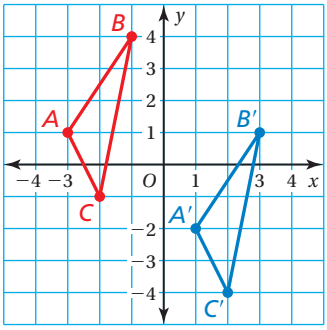
Name _____

Key Concept and Vocabulary



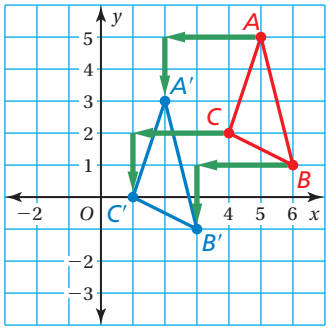
Visual Model

Every point of the figure moves the same distance and in the same direction.



Skill Example

1.



The coordinates of the image are $A'(2, 3)$, $B'(3, -1)$, and $C'(1, 0)$.

Application Example

2. You map your neighborhood in a coordinate plane. You walk from your house at (2, 1) to your school at (5, 7). Describe a possible translation on the map for this situation.

You can walk $5 - 2 = 3$ units right and then $7 - 1 = 6$ units up.

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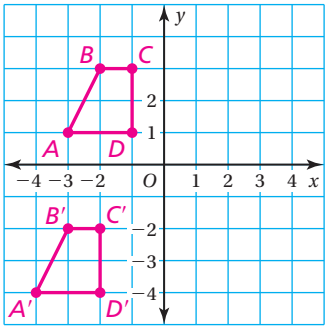
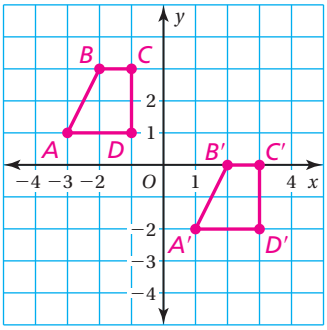
The vertices of a quadrilateral are $A(-3, 1)$, $B(-2, 3)$, $C(-1, 3)$, and $D(-1, 1)$. Draw the figure and its image after the translation.

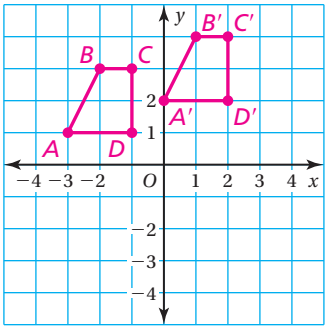
3. 1 unit left and 5 units down



4. $(x + 4, y - 3)$



5. $(x + 3, y + 1)$



6. FLYING DISC You throw a flying disc to the point (6, 4). Use a translation to describe a path your friend can take to catch the flying disc. Your friend can run 3 units right and then 2 units up.