

2-7 Translations and Reflections on the Coordinate Plane

P101-103

What You'll Learn

Skim Lesson 2-7. Predict two things that you expect to learn based on the headings and the Key Concept box.

1. Define & Identify Transformations
2. Draw Translations & Reflections on a coordinate Plane

Active Vocabulary

New Vocabulary Write the correct term next to each definition.

- Reflection ▶ a transformation where each point of the original figure has a corresponding figure on the other side of a line of symmetry
- Translation ▶ a transformation where each point of an original figure moves the same distance in the same direction
- line of symmetry ▶ a line of reflection
- Translation ▶ an operation that maps an original geometric figure onto a new figure
- image ▶ a transformed figure

Vocabulary Link *Transform* is a word that is used in everyday English. Find the definition of *transform* using a dictionary. Explain how the English definition can help you remember how *transformation* is used in mathematics.

On your own

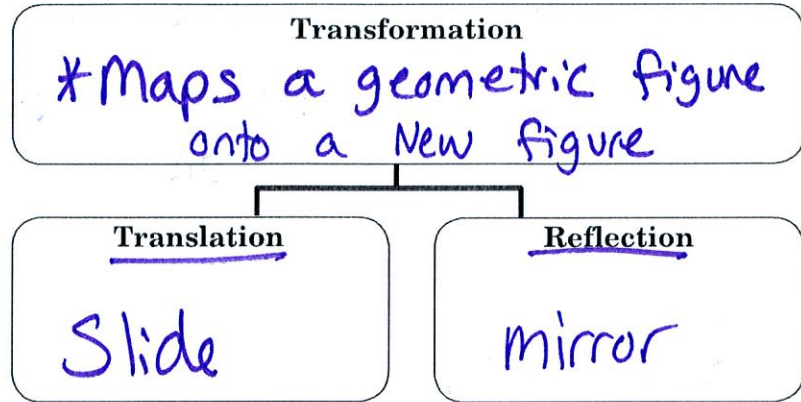
Lesson 2-7 (continued)

Main Idea

Details

Transformations
p. 101

Complete the organizer by defining the terms in your own words.



Translations and Reflections
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Compare and contrast *translation* and *reflection*.

	Translation	Reflection
How they are alike	same size & shape	
How they are different	slide	mirror

Helping You Remember Identify each type of transformation. Then describe in your own words how you know that you are correct.

Translation

Reflection

Ex: 1

Translate

$\square JKLM$

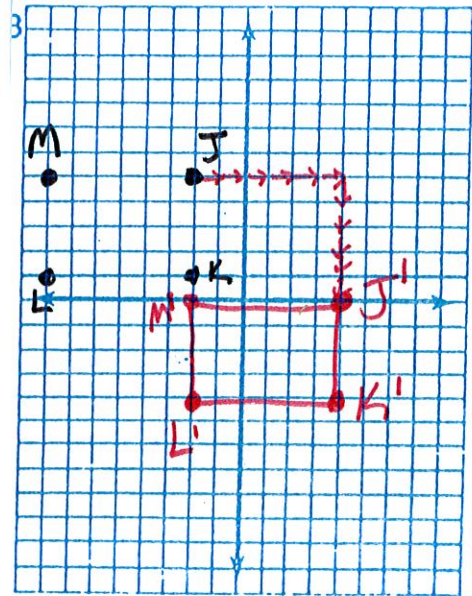
6 units Right &
5 units down

$J(-2, 5)$

$K(-2, 1)$

$L(-8, 1)$

$M(-8, 5)$



Ex: 2

Reflect

$\square HJLQ$

over y-axis

$H(-5, 4)$

$J(-1, 4)$

$L(-3, 0)$

$Q(-7, 0)$

