9-1 Additional Vocabulary Support

Translations

Choose the word from the list below that best matches each phrase.

> composition of transformations   corresponding parts   image
> rigid motion   preimage   translation
> transformation(s)

1. the figure that results from a transformation _____

2. the original figure in a transformation _____

3. flipping, sliding, or turning a figure _____

4. two or more transformations in combination _____

Use a word from the list above to complete each sentence.

5. This transformation is an example of a _____
because the figure slides in one direction, but does not flip,
turn, or change size.

6. This translation is an example of a(n) _____
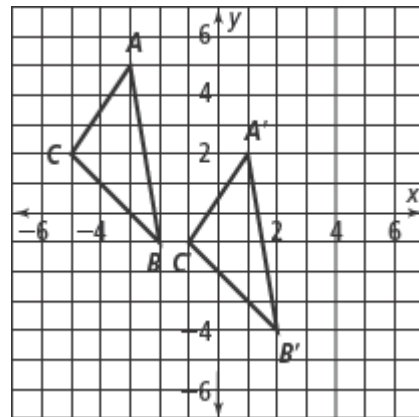because it preserves distance and angle measures.

7. In a translation, the sides or angles of the preimage and image
that have the same lengths or angle measures are _____.

Multiple Choice

8. For the transformation shown at the right,
triangle *ABC* is called the

   Ⓐ corresponding part.   Ⓒ image

   Ⓑ composition.   Ⓓ preimage.

9. What type of transformation is shown at the right?

   Ⓕ a flip   Ⓗ a slide

   Ⓖ a reduction   Ⓘ a turn

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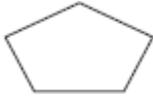
9-1 Practice
Form G

Translations

Tell whether the transformation appears to be a rigid motion. Explain.

1.

Preimage   Image
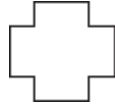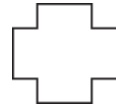
2.

Preimage   Image

3.

Preimage   Image

4.

Preimage   Image

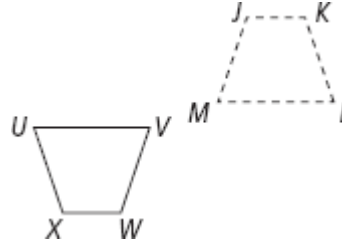**In each diagram, the dashed-line figure is an image of the solid-line figure.**
(a) Choose an angle or point from the preimage and name its image.
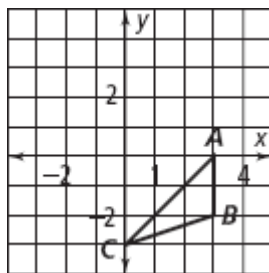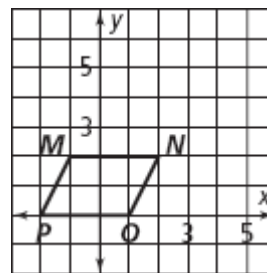**(b) List all pairs of corresponding sides.**

5.

6.

Graph the image of each figure under the given translation.

7. $T_{<-1, 4>} (\triangle ABC)$
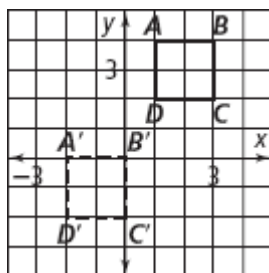
8. $T_{<3, 3>} (MNOP)$

The dashed-line figure is a translation image of the solid-line figure. Write a rule to describe each translation.

9.

10.

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