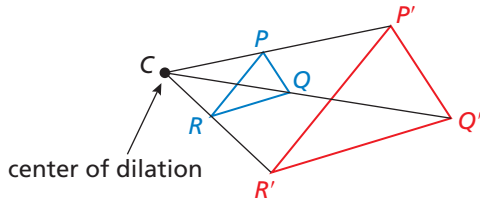


## Vocabulary Flash Cards

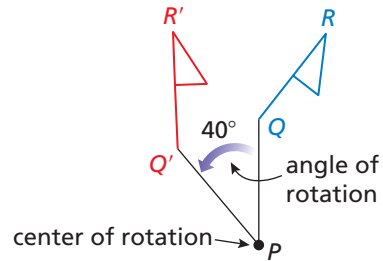
<p><b>angle of rotation</b></p> <p><i>Chapter 4 (p. 190)</i></p>	<p><b>center of dilation</b></p> <p><i>Chapter 4 (p. 208)</i></p>
<p><b>center of rotation</b></p> <p><i>Chapter 4 (p. 190)</i></p>	<p><b>center of symmetry</b></p> <p><i>Chapter 4 (p. 193)</i></p>
<p><b>component form</b></p> <p><i>Chapter 4 (p. 174)</i></p>	<p><b>composition of transformations</b></p> <p><i>Chapter 4 (p. 176)</i></p>
<p><b>congruence transformation</b></p> <p><i>Chapter 4 (p. 201)</i></p>	<p><b>congruent figures</b></p> <p><i>Chapter 4 (p. 200)</i></p>

# Vocabulary Flash Cards

The fixed point in a dilation

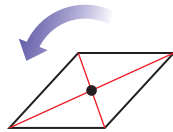


The angle that is formed by rays drawn from the center of rotation to a point and its image

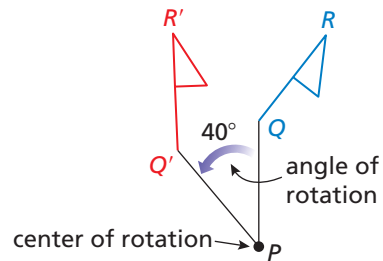


The center of rotation in a figure that has rotational symmetry

The parallelogram has rotational symmetry. The center is the intersection of the diagonals. A  $180^\circ$  rotation about the center maps the parallelogram onto itself.



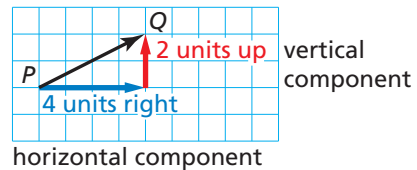
The fixed point in a rotation



The combination of two or more transformations to form a single transformation

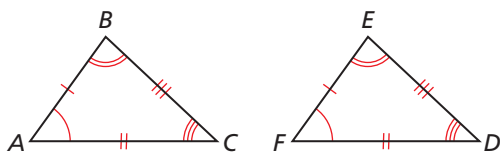
A glide reflection is an example of a composition of transformations.

A form of a vector that combines the horizontal and vertical components



The component form of  $\overline{PQ}$  is  $\langle 4, 2 \rangle$ .

Geometric figures that have the same size and shape



$$\triangle ABC \cong \triangle DEF$$

A transformation that preserves length and angle measure

Translations, reflections, and rotations are three types of congruence transformations.

## Vocabulary Flash Cards

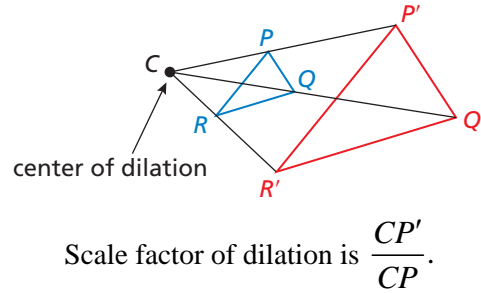
<p><b>dilation</b></p> <p><i>Chapter 4 (p. 208)</i></p>	<p><b>enlargement</b></p> <p><i>Chapter 4 (p. 208)</i></p>
<p><b>glide reflection</b></p> <p><i>Chapter 4 (p. 184)</i></p>	<p><b>horizontal component</b></p> <p><i>Chapter 4 (p. 174)</i></p>
<p><b>image</b></p> <p><i>Chapter 4 (p. 174)</i></p>	<p><b>initial point</b></p> <p><i>Chapter 4 (p. 174)</i></p>
<p><b>line of reflection</b></p> <p><i>Chapter 4 (p. 182)</i></p>	<p><b>line symmetry</b></p> <p><i>Chapter 4 (p. 185)</i></p>

# Vocabulary Flash Cards

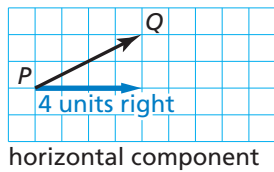
A dilation in which the scale factor is greater than 1

A dilation with a scale factor of 2 is an enlargement.

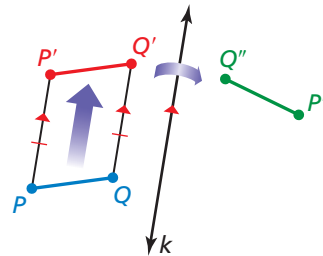
A transformation in which a figure is enlarged or reduced with respect to a fixed point



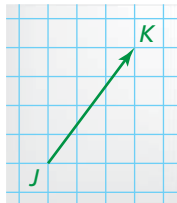
The horizontal change from the starting point of a vector to the ending point



A transformation involving a translation followed by a reflection

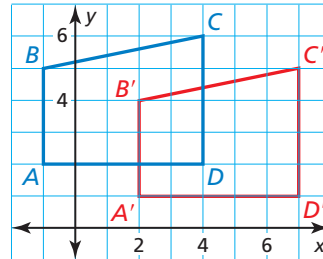


The starting point of a vector



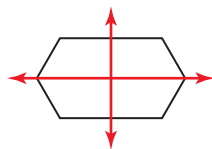
Point  $J$  is the initial point of  $\overline{JK}$ .

A figure that results from the transformation of a geometric figure



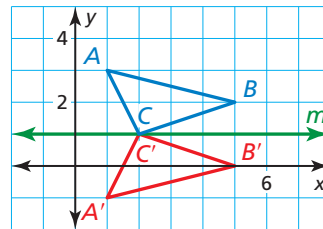
$A'B'C'D'$  is the image of  $ABCD$  after a translation.

A figure in the plane has line symmetry when the figure can be mapped onto itself by a reflection in a line.



Two lines of symmetry

A line that acts as a mirror for a reflection



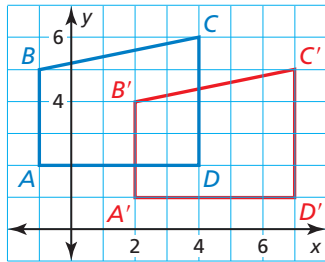
$\Delta A'B'C'$  is the image of  $\Delta ABC$  after a reflection in the line  $m$ .

## Vocabulary Flash Cards

<p><b>line of symmetry</b></p> <p><i>Chapter 4 (p. 185)</i></p>	<p><b>preimage</b></p> <p><i>Chapter 4 (p. 174)</i></p>
<p><b>reduction</b></p> <p><i>Chapter 4 (p. 208)</i></p>	<p><b>reflection</b></p> <p><i>Chapter 4 (p. 182)</i></p>
<p><b>rigid motion</b></p> <p><i>Chapter 4 (p. 176)</i></p>	<p><b>rotation</b></p> <p><i>Chapter 4 (p. 190)</i></p>
<p><b>rotational symmetry</b></p> <p><i>Chapter 4 (p. 193)</i></p>	<p><b>scale factor</b></p> <p><i>Chapter 4 (p. 208)</i></p>

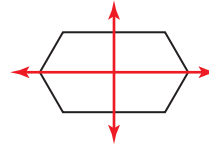
# Vocabulary Flash Cards

The original figure before a transformation



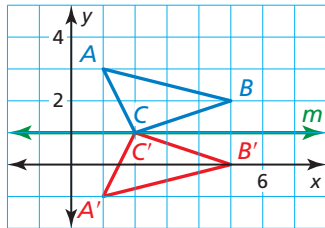
$ABCD$  is the preimage and  $A'B'C'D'$  is the image after a translation.

A line of reflection that maps a figure onto itself



Two lines of symmetry

A transformation that uses a line like a mirror to reflect a figure

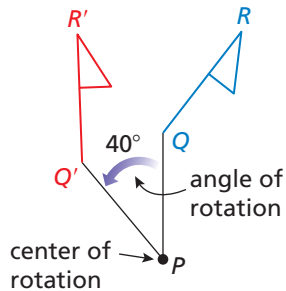


$\triangle A'B'C'$  is the image of  $\triangle ABC$  after a reflection in the line  $m$ .

A dilation in which the scale factor is greater than 0 and less than 1

A dilation with a scale factor of  $\frac{1}{2}$  is a reduction.

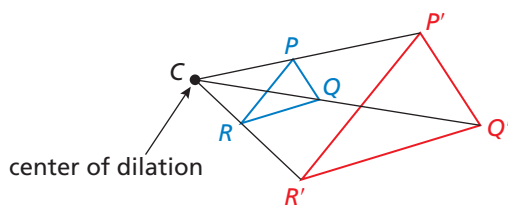
A transformation in which a figure is turned about a fixed point



A transformation that preserves length and angle measure

Translations, reflections, and rotations are three types of rigid motions.

The ratio of the lengths of the corresponding sides of the image and the preimage of a dilation

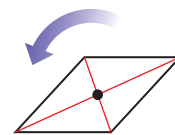


Scale factor of dilation is  $\frac{CP'}{CP}$ .

A figure has rotational symmetry when the figure can be mapped onto itself by a rotation of  $180^\circ$  or less about the center of the figure.

The parallelogram has rotational symmetry. The center is the intersection of the diagonals.

A  $180^\circ$  rotation about the center maps the parallelogram onto itself.

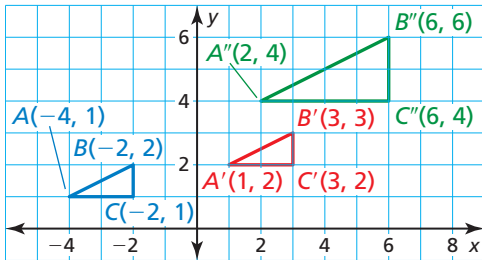


## Vocabulary Flash Cards

<p><b>similar figures</b></p> <p><i>Chapter 4 (p. 216)</i></p>	<p><b>similarity transformation</b></p> <p><i>Chapter 4 (p. 216)</i></p>
<p><b>terminal point</b></p> <p><i>Chapter 4 (p. 174)</i></p>	<p><b>transformation</b></p> <p><i>Chapter 4 (p. 174)</i></p>
<p><b>translation</b></p> <p><i>Chapter 4 (p. 174)</i></p>	<p><b>vector</b></p> <p><i>Chapter 4 (p. 174)</i></p>
<p><b>vertical component</b></p> <p><i>Chapter 4 (p. 174)</i></p>	

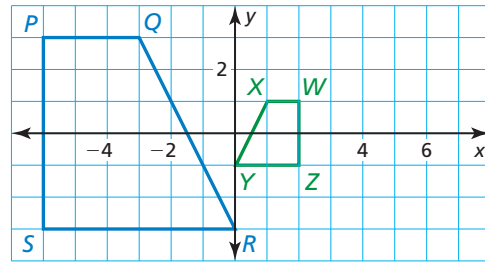
# Vocabulary Flash Cards

A dilation or a composition of rigid motions and dilations



$\Delta A'B'C'$  is the image of  $\Delta ABC$  after a similarity transformation.

Geometric figures that have the same shape, but not necessarily the same size

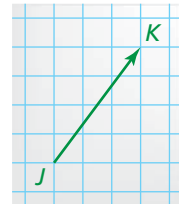


Trapezoid  $PQRS$  is similar to trapezoid  $WXYZ$ .

A function that moves or changes a figure in some way to produce a new figure

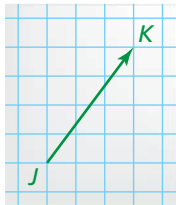
Four basic transformations are translations, reflections, rotations, and dilations.

The ending point of a vector



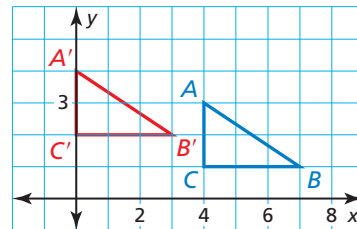
Point  $K$  is the terminal point of  $\overline{JK}$ .

A quantity that has both direction and magnitude, and is represented in the coordinate plane by an arrow drawn from one point to another



$\overline{JK}$  with initial point  $J$  and terminal point  $K$ .

A transformation that moves every point of a figure the same distance in the same direction



$\Delta A'B'C'$  is the image of  $\Delta ABC$  after a translation.

The vertical change from the starting point of a vector to the ending point

