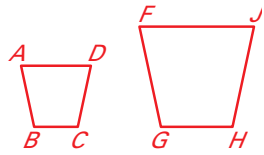
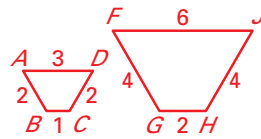


# Words to Review

Give an example of the vocabulary word.

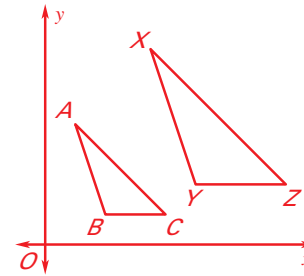
<p><b>Ratio</b></p> <p><math>\frac{4}{3}</math> or 4:3</p>	<p><b>Proportion</b></p> <p><math>\frac{x}{4} = \frac{3}{12}</math></p>
<p><b>Means</b></p> <p>The means of <math>\frac{a}{b} = \frac{c}{d}</math> are <math>b</math> and <math>c</math>.</p>	<p><b>Extremes</b></p> <p>The extremes of <math>\frac{a}{b} = \frac{c}{d}</math> are <math>a</math> and <math>d</math>.</p>
<p><b>Geometric mean</b></p> <p>The geometric mean of two positive numbers <math>a</math> and <math>b</math> is the positive number <math>x</math> that satisfies <math>\frac{a}{x} = \frac{x}{b}</math>.</p>	<p><b>Scale drawings</b></p> <p>A scale drawing is a drawing that is the same shape as the object it represents.</p> <p>A map is an example of a scale drawing.</p>
<p><b>Scale</b></p> <p>The scale of a map is 1 inch to 25 miles.</p>	<p><b>Similar polygons</b></p>  <p><math>ABCD \sim FGHI</math></p>

**Scale factor of two similar polygons**

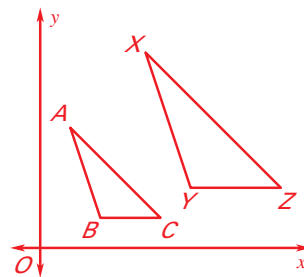


The scale factor of  $ABCD$  to  $FGHI$  is  $\frac{1}{2}$ .

**Dilation**

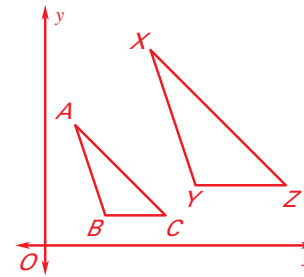


**Center of dilation**



The center of dilation is  $(0, 0)$ .

**Scale factor of a dilation**



The scale factor of the dilation is  $\frac{XY}{AB}$ .

**Reduction**

A dilation with a scale factor greater than 0 and less than 1 is a reduction.

**Enlargement**

A dilation with a scale factor greater than 1 is an enlargement.

**Review your notes and Chapter 6 by using the Chapter Review on pages 418–421 of your textbook.**