### Lesson 14 Practice Problems

1. These two triangles are similar. What are $a$ and $b$? Note: the two figures are not drawn to scale.
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1. Here is triangle $ABC$. Triangle $XYZ$ is similar to $ABC$ with scale factor $\frac{1}{4}$.
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	1. Draw what triangle $XYZ$ might look like.
	2. How do the angle measures of triangle $XYZ$ compare to triangle $ABC$? Explain how you know.
	3. What are the side lengths of triangle $XYZ$?
	4. For triangle $XYZ$, calculate (long side) $÷$ (medium side), and compare to triangle $ABC$.
1. The two triangles shown are similar. Find the value of $\frac{d}{c}$.
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1. The diagram shows two nested triangles that share a vertex. Find a center and a scale factor for a dilation that would move the larger triangle to the smaller triangle.
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* (From Unit 2, Lesson 10.)
1. Which is a scaled copy of Polygon A? Identify a pair of corresponding sides and a pair of corresponding angles. Compare the areas of the scaled copies.
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* (From Unit 2, Lesson 2.)
1. A map of Colorado says that the scale is 1 inch to 20 miles or 1 to 1,267,200. Are these two ways of reporting the scale the same? Explain your reasoning.
* (From Unit 2, Lesson 7.)



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