### Lesson 9 Practice Problems

1. These two triangles are similar. What are $a$ and $b$? Note: the two figures are not drawn to scale.
* 
1. Here is triangle $ABC$. Triangle $XYZ$ is similar to $ABC$ with scale factor $\frac{1}{4}$.
* 
	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 $\frac{d}{c}$.
* 
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.
* 
* (From Unit 2, Lesson 5.)



© CC BY Open Up Resources. Adaptations CC BY IM.