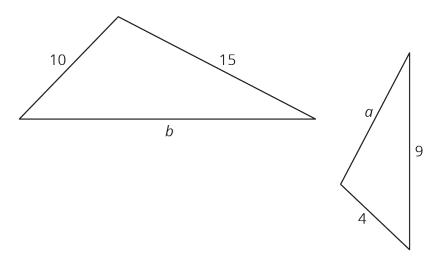
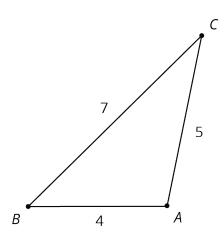


Lesson 14 Practice Problems

1. These two triangles are similar. What are a and b? Note: the two figures are not drawn to scale.



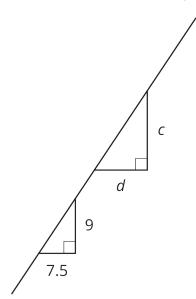
2. Here is triangle ABC. Triangle XYZ is similar to ABC with scale factor $\frac{1}{4}$.



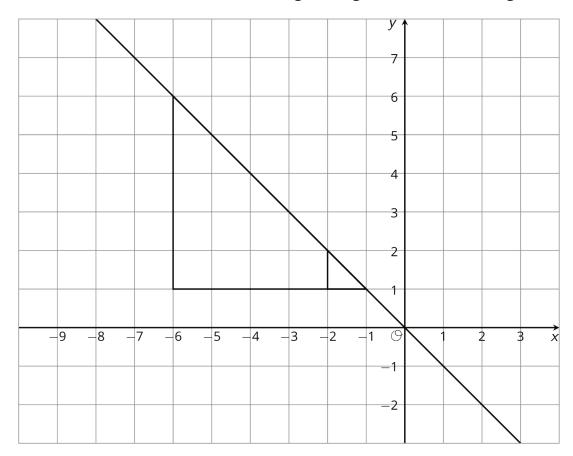
- a. Draw what triangle XYZ might look like.
- b. How do the angle measures of triangle XYZ compare to triangle ABC? Explain how you know.
- c. What are the side lengths of triangle XYZ?
- d. For triangle XYZ, calculate (long side) \div (medium side), and compare to triangle ABC.



3. The two triangles shown are similar. Find the value of $\frac{d}{c}$.



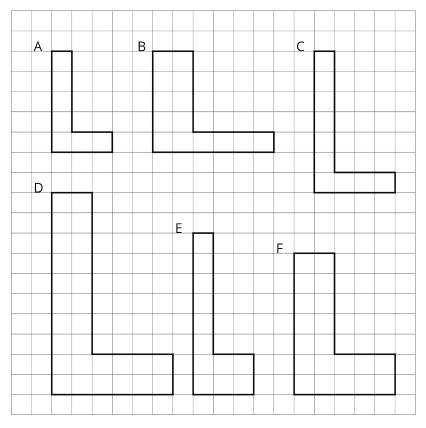
4. The diagram shows two nested triangles that share a vertex. Find a center and a scale factor for a dilation that would move the larger triangle to the smaller triangle.



(From Unit 2, Lesson 10.)



5. 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.



(From Unit 2, Lesson 2.)

6. 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.)