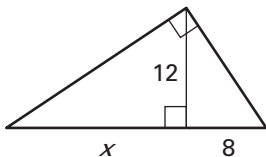
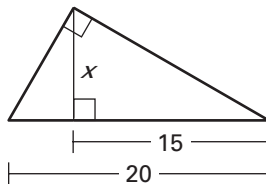


LESSON
7.3
Practice
For use with pages 448–456
Complete and solve the proportion.

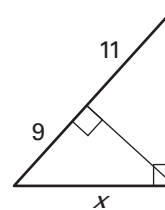
1. $\frac{x}{12} = \frac{?}{8}$



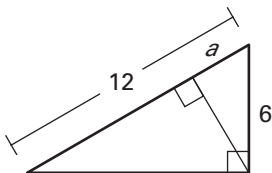
2. $\frac{15}{x} = \frac{x}{?}$



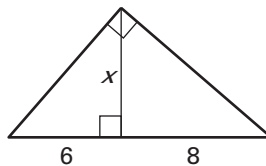
3. $\frac{9}{x} = \frac{x}{?}$


Find the value(s) of the variable(s).

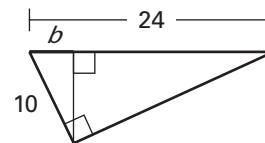
4.



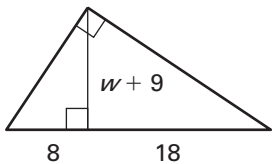
5.



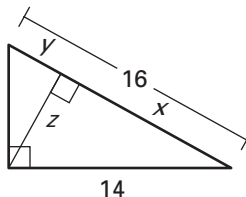
6.



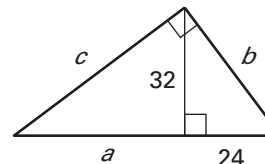
7.



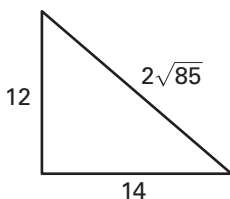
8.



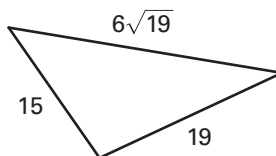
9.


Tell whether the triangle is a right triangle. If so, find the length of the altitude to the hypotenuse. Round decimal answers to the nearest tenth.

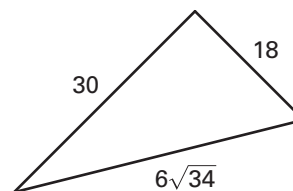
10.



11.

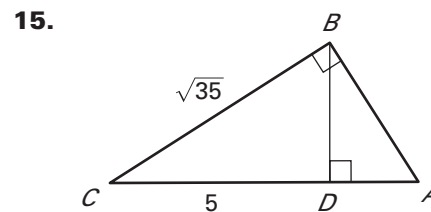
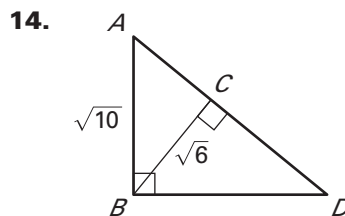
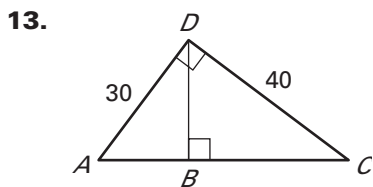


12.



LESSON 7.3 Practice *continued*
For use with pages 448–456

Use the Geometric Mean Theorems to find AC and BD .

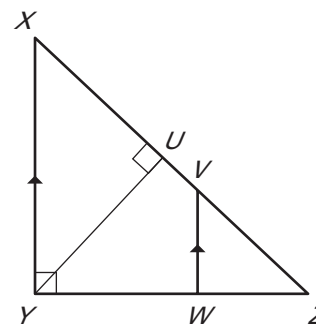


16. Complete the proof.

GIVEN: $\triangle XYZ$ is a right triangle with $m\angle XYZ = 90^\circ$.
 $\overline{VW} \parallel \overline{XY}$, \overline{YU} is an altitude of $\triangle XYZ$.

PROVE: $\triangle YUZ \sim \triangle VWZ$

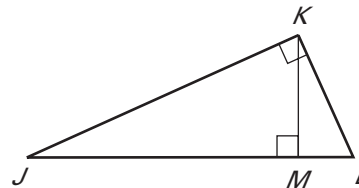
Statements	Reasons
1. $\triangle XYZ$ is a right \triangle with altitude \overline{YU} .	1. ?
2. $\triangle XYZ \sim \triangle YUZ$	2. ?
3. $\overline{VW} \parallel \overline{XY}$	3. ?
4. $\angle VWZ \cong \angle XYZ$	4. ?
5. $\angle Z \cong \angle Z$	5. ?
6. ?	6. AA Similarity Postulate
7. $\triangle YUZ \sim \triangle VWZ$	7. ?



LESSON
7.3
Practice *continued*
For use with pages 448–456

In Exercises 17–19, use the diagram.

- 17.** Sketch the three similar triangles in the diagram.
Label the vertices.



- 18.** Write similarity statements for the three triangles.

- 19.** Which segment's length is the geometric mean of LM and JM ?

- 20. Kite Design** You are designing a diamond-shaped kite. You know that $AB = 38.4$ centimeters, $BC = 72$ centimeters, and $AC = 81.6$ centimeters. You want to use a straight crossbar \overline{BD} . About how long should it be?

