LESSON 9.1

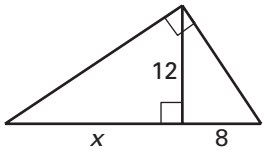
NAME _____ DATE _____

Practice B

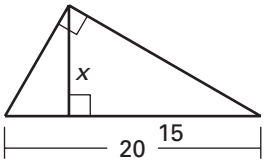
For use with pages 527–534

Complete and solve the proportion.

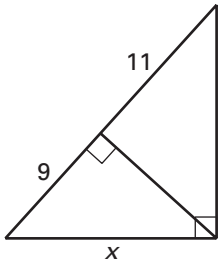
1. $\frac{x}{12} = \frac{?}{8}$



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

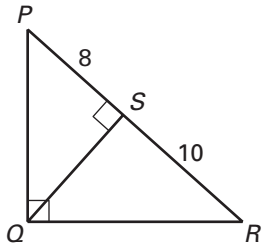


3. $\frac{9}{x} = \frac{x}{?}$

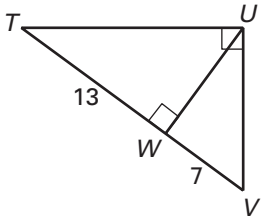


Write similarity statements for three similar triangles in the diagram. Then find the given length.

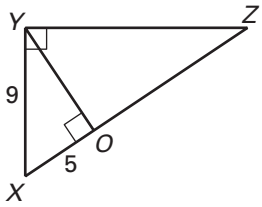
4. Find QS.



5. Find TU.

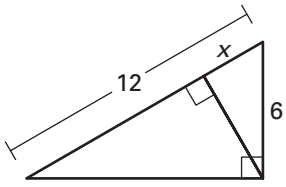


6. Find XZ.

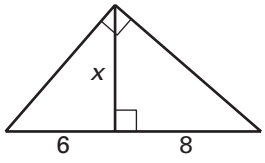


Find the value of each variable.

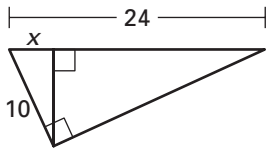
7.



8.



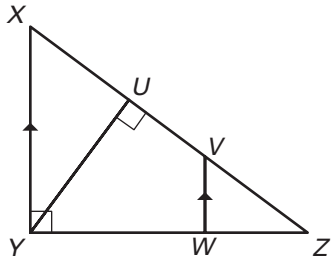
9.



Complete the proof.

10. Given: $\triangle XYZ$ is a right triangle with $m\angle XYZ = 90°$; $\overline{VW} \parallel \overline{XY}$, $\overline{YU}$ 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. $\triangle XYZ \sim \triangle VWZ$	**6.** ?
7. $\triangle YUZ \sim \triangle VWZ$	**7.** ?