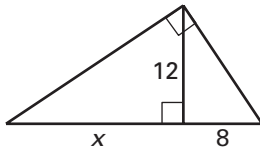


Practice B

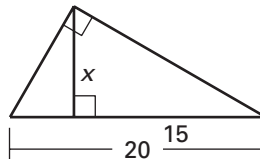
For use with pages 527–534

Complete and solve the proportion.

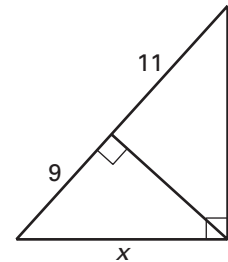
1. $\frac{x}{12} = \frac{?}{8}$



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

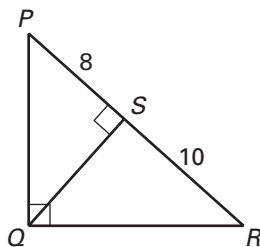


3. $\frac{9}{x} = \frac{x}{?}$

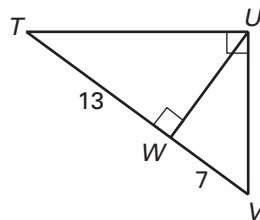


Write similarity statements for three similar triangles in the diagram. Then find the given length.

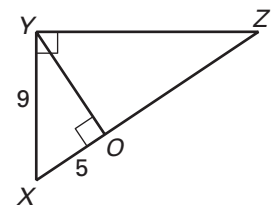
4. Find QS .



5. Find TU .

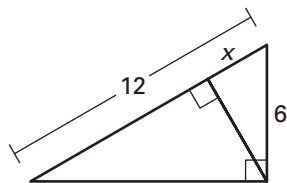


6. Find XZ .

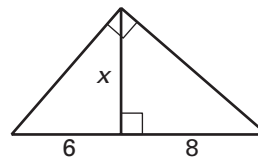


Find the value of each variable.

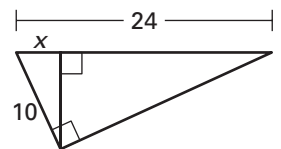
7.



8.



9.



Complete the proof.

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

