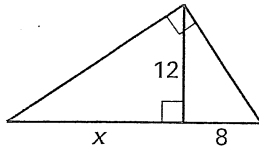


**Practice B**

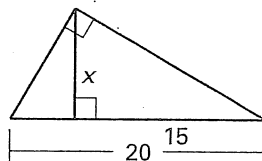
For use with pages 527-534

Complete and solve the proportion.

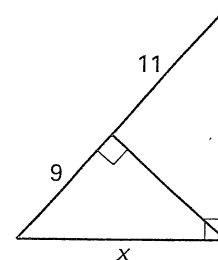
1.  $\frac{x}{12} = \frac{?}{8}$



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

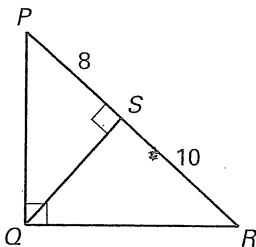


3.  $\frac{9}{x} = \frac{x}{?}$

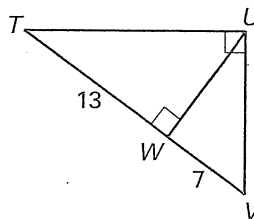


Write similarity statements for three similar triangles in the diagram. Then find the given length.

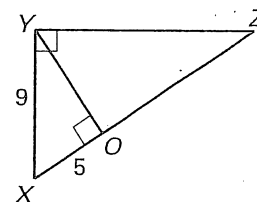
4. Find  $QS$ .



5. Find  $TU$ .

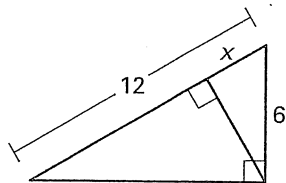


6. Find  $XZ$ .

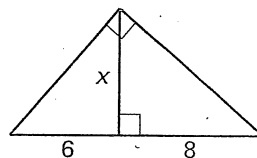


Find the value of each variable.

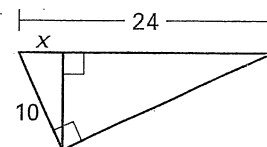
7.



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**

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

**Reasons**

1. \_\_\_\_\_ ?
2. \_\_\_\_\_ ?
3. \_\_\_\_\_ ?
4. \_\_\_\_\_ ?
5. \_\_\_\_\_ ?
6. \_\_\_\_\_ ?
7. \_\_\_\_\_ ?

