



Name \_\_\_\_\_

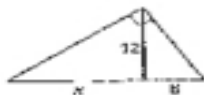
Date \_\_\_\_\_

**Practice B**

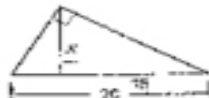
For use with pages 527-534

Complete and solve the proportion.

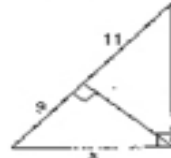
1.  $\frac{y}{12} = \frac{9}{k}$



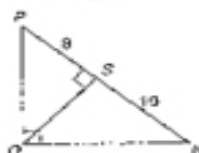
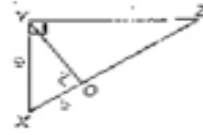
2.  $\frac{15}{x} = \frac{x}{20}$



3.  $\frac{9}{4} = \frac{2}{5}$



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

4. Find  $QN$ .5. Find  $YU$ .6. Find  $XZ$ .

Find the value of each variable.

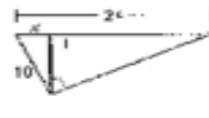
7.



8.



9.



Complete the proof.

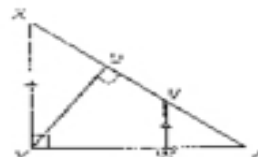
10. Given:  $\triangle XYZ$  is a right triangle with  $m\angle XYZ = 90^\circ$ ;  $\overline{WV} \parallel \overline{XY}$ ;  $\overline{YW}$  is an altitude of  $\triangle XYZ$ .Prove:  $\triangle YWZ \sim \triangle VWZ$ 

Statements \_\_\_\_\_

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

Reasons \_\_\_\_\_

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



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Geometry  
Chapter 9 Resource Book