LESSON 9.1

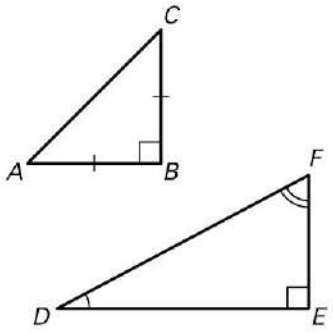
NAME _____ DATE _____

Practice A

For use with pages 527–534

Use the diagrams at the right.

1. Name the legs of $\triangle ABC$.
2. Name the hypotenuse of $\triangle ABC$.
3. What is the measure of $\angle A$ and $\angle C$?
4. Name the legs of $\triangle DEF$.
5. Name the hypotenuse of $\triangle DEF$.
6. Could $\triangle DEF$ have an obtuse angle? Explain.

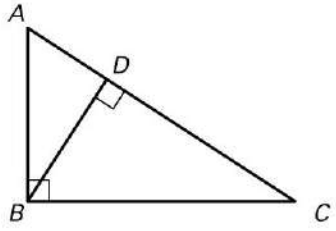


Find the geometric mean of the numbers. Simplify.

7. 16 and 5
8. 9 and 25
9. 6 and 49

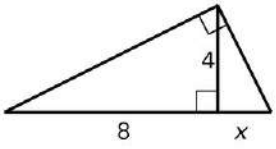
Use the diagram.

10. Sketch the three similar triangles in the diagram. Label the vertices
11. Write similarity statements for the three triangles.

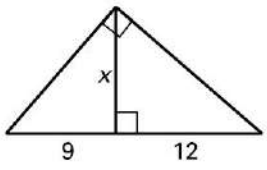


Complete and solve the proportion.

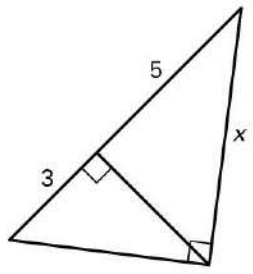
12. $\frac{8}{4} = \frac{?}{x}$



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

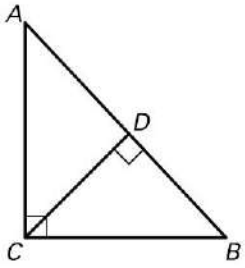


14. $\frac{8}{x} = \frac{x}{?}$

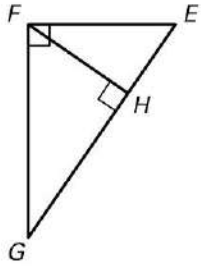


Write similarity statements for the three similar triangles in the diagram. Then complete the proportion.

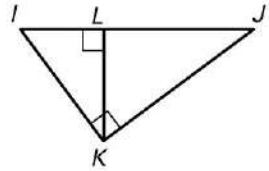
15. $\frac{AD}{CD} = \frac{?}{DB}$



16. $\frac{EG}{FG} = \frac{FG}{?}$



17. $\frac{IJ}{IK} = \frac{?}{IL}$



LESSON 9.1

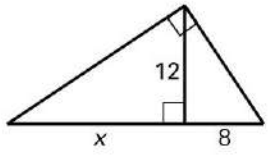
NAME _____ DATE _____

Practice B

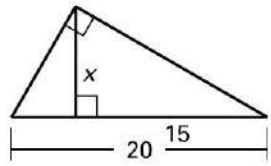
For use with pages 527–534

Complete and solve the proportion.

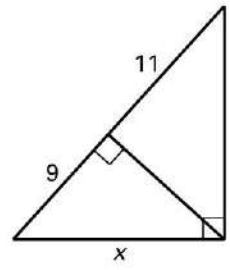
1. $\frac{x}{12} = \frac{?}{8}$



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

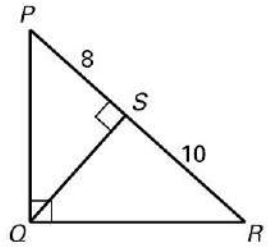


3. $\frac{9}{x} = \frac{x}{?}$

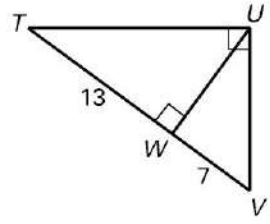


Write similarity statements for three similar triangles in the diagram. Then find the given length.

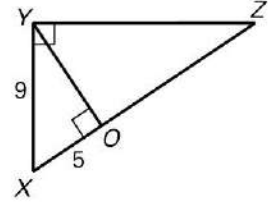
4. Find QS.



5. Find TU.

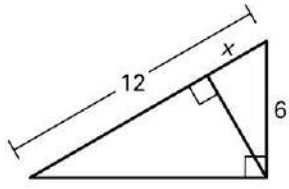


6. Find XZ.

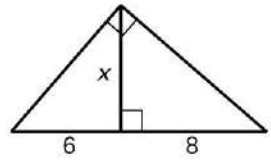


Find the value of each variable.

7.



8.



9.