Name _____ Date _____

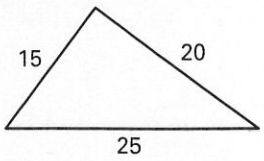
LESSON 7.2

Practice A

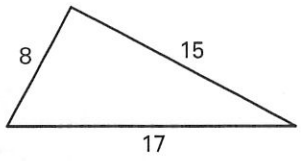
For use with the lesson "Use the Converse of the Pythagorean Theorem"

Tell whether the triangle is a right triangle.

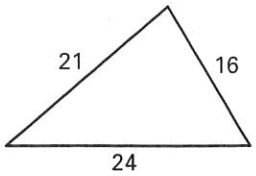
1.



2.



3.



Decide whether the numbers can represent the side lengths of a triangle. If they can, classify the triangle as *acute*, *right*, or *obtuse*.

4. 6, 8, 10

5. 5, 7, 9

6. 8, 9, 10

7. 10, 12, 30

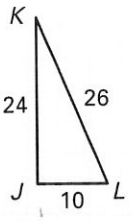
8. 16, 30, 34

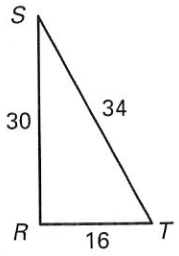
9. 18, 34, 45

In Exercises 16 and 17, copy and complete the statement with <, >, or =, if possible. If it is not possible, *explain* why.

16. $m\angle J$? $m\angle R$

17. $m\angle K + m\angle L$? $m\angle S + m\angle T$





18. Multiple Choice What type of triangle has side lengths of 4, 4, and 4?

A. Acute scalene **B.** Acute equilateral

C. Obtuse scalene **D.** Obtuse isosceles

19. Multiple Choice What type of triangle has two of the three angles with measurements of 24° and 105°?

A. Acute **B.** Right **C.** Obtuse **D.** None

In Exercises 20 and 21, use the diagram and the following information.

Maps The distances between three towns are given in the diagram.

20. Is the triangle ($\triangle ABC$) formed by the three towns a right triangle?

21. Town B is directly west of town C. Is town A directly north of town C?