

Name \_\_\_\_\_

Date \_\_\_\_\_

If you turn this in on time: do the odds.

If you turn this in late or

you are doing it over: do the evens.

LESSON  
7.2

## Practice A

For use with pages 440–447

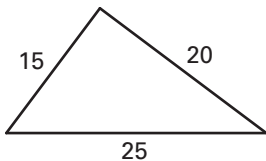
Student  
score:  
How well  
do you feel  
you understand  
this learning  
target:

A  
B  
C  
D  
F

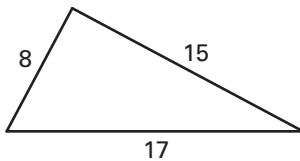
Teacher  
Score:

**Tell whether the triangle is a right triangle.**

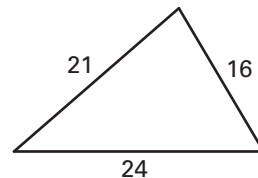
1.



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

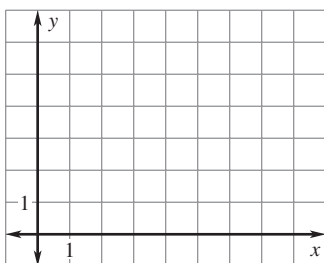
8. 16, 30, 34

9. 18, 34, 45

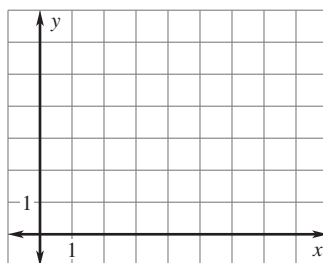
**Graph points *A*, *B*, and *C*. Connect the points to form  $\triangle ABC$ .**

**Decide whether  $\triangle ABC$  is *acute*, *right*, or *obtuse*.**

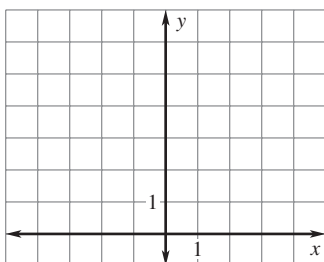
10.  $A(1, 5), B(1, 1), C(6, 1)$



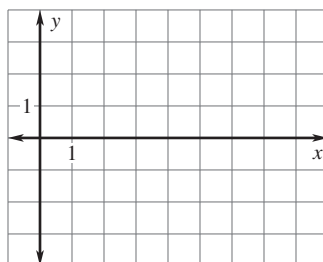
11.  $A(2, 4), B(4, 1), C(7, 1)$



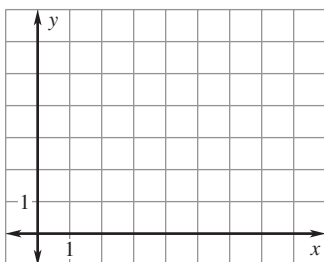
12.  $A(-2, 1), B(2, 1), C(0, 5)$



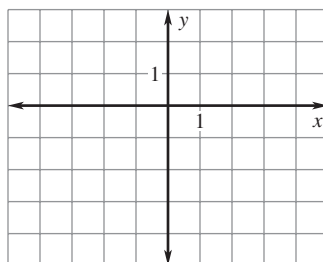
13.  $A(3, -2), B(1, 0), C(7, 2)$



14.  $A(0, 2), B(3, 3), C(5, 1)$



15.  $A(-1, 1), B(-2, -4), C(2, -3)$



LESSON 7.2

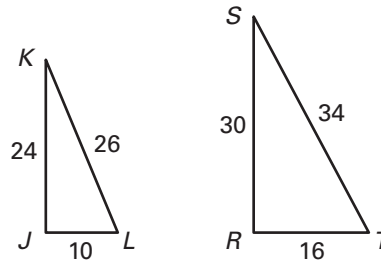
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LESSON  
7.2**Practice A** *continued*  
For use with pages 440–447

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

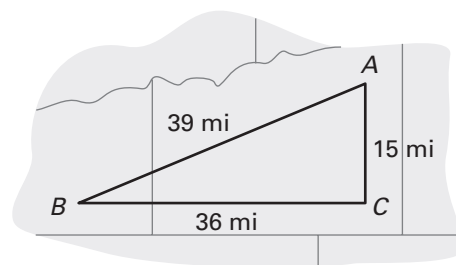
19. **Multiple Choice** What type of triangle has two of the three angles with measurements of  $24^\circ$  and  $105^\circ$ ?

- 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  $C$ ?



In Exercises 22 and 23, you will use two different methods for determining whether  $\triangle ABC$  is a right triangle.

22. **Method 1** Find the slope of  $\overline{AB}$  and the slope of  $\overline{BC}$ . What do the slopes tell you about  $\angle ABC$ ? Is  $\triangle ABC$  a right triangle?
23. **Method 2** Use the Distance Formula and the Converse of the Pythagorean Theorem to determine whether  $\triangle ABC$  is a right triangle.

