

Name _____

Date _____

LESSON 7.2 Practice
For use with pages 440–447

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

1. 5, 12, 13

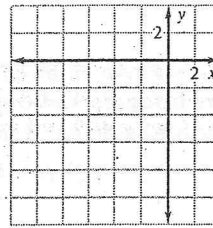
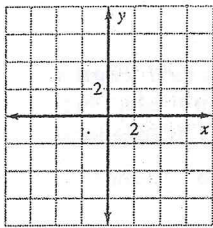
2. $\sqrt{8}$, 4, 6

3. 20, 21, 28

Graph points **A**, **B**, and **C**. Connect the points to form $\triangle ABC$. Decide whether $\triangle ABC$ is *right*, *acute*, or *obtuse*.

7. $A(-3, 5)$, $B(0, -2)$, $C(4, 1)$

8. $A(-8, -4)$, $B(-5, -2)$, $C(-1, -7)$



The sides and classification of a triangle are given below. The length of the longest side is the integer given. What value(s) of x make the triangle?

15. $x, x, 8$; right

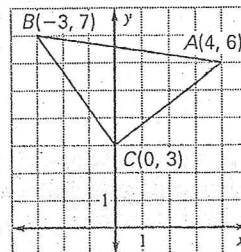
16. $x, x, 12$; obtuse

17. $x, x, 6$; acute

18. $x, x + 3, 15$; obtuse

In Exercises 23–25, you will use two different methods for determining whether $\triangle ABC$ is a right triangle. **USE ONE OF THE METHODS**

23. **Method 1** Find the slope of \overline{AC} and the slope of \overline{BC} . What do the slopes tell you about $\angle ACB$? Is $\triangle ABC$ a right triangle? How do you know?



24. **Method 2** Use the Distance Formula and the Converse of the Pythagorean Theorem to determine whether $\triangle ABC$ is a right triangle.