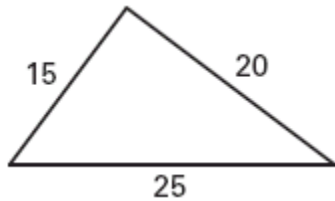


Name _____

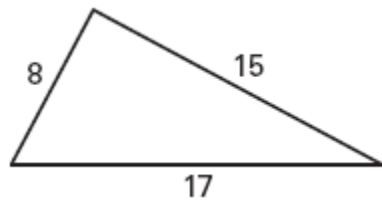
Assignment 60 LESSON 7.2 Practice A

Tell whether the triangle is a right triangle.

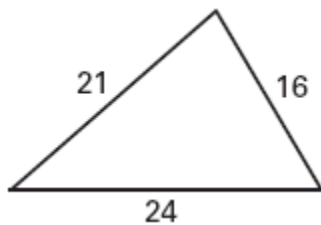
1.



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

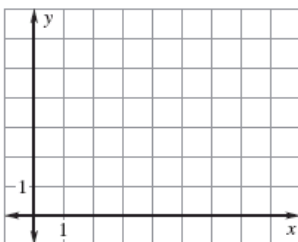
7. 10, 12, 30

8. 16, 30, 34

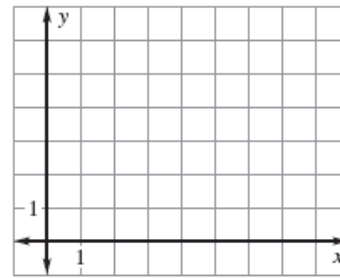
9. 18, 34, 45

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

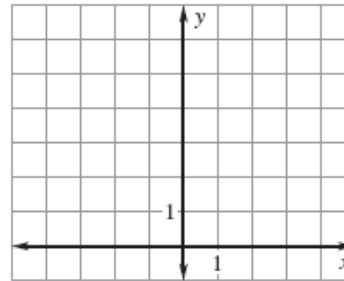
10. $A(1, 5), B(1, 1), C(6, 1)$



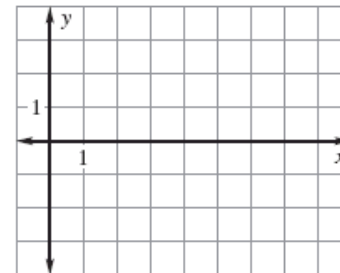
Date $A(2, 4), B(4, 1), C(7, 1)$



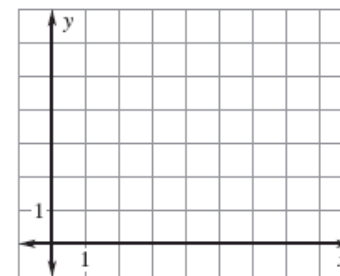
12. $A(-2, 1), B(2, 1), C(0, 5)$



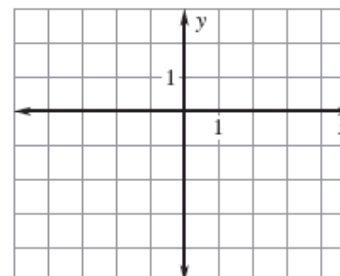
13. $A(3, -2), B(1, 0), C(7, 2)$



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



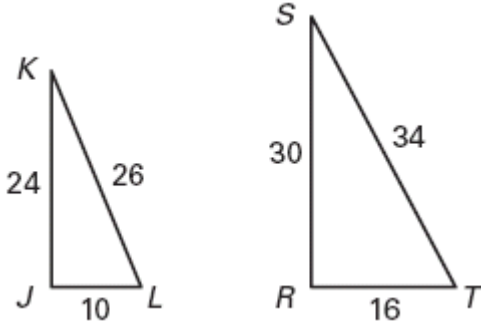
15. $A(-1, 1), B(-2, -4), C(2, -3)$



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

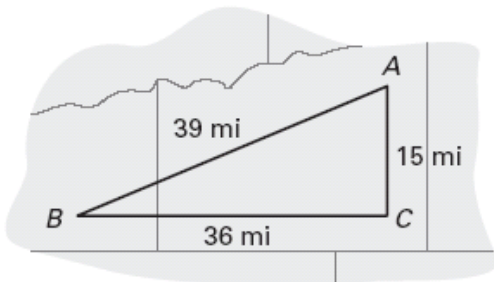
19. **Multiple Choice** What type of triangle has two of the three angles with measurements of 24° and 105° ?

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

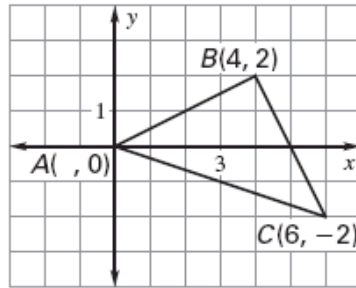
In Exercises 20 and 21, use the diagram and the following information.

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 ?



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.