Name _____ Date _____

LESSON 4.1

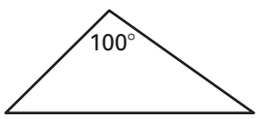
Practice B

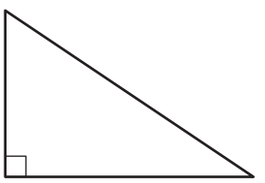
For use with pages 216–224

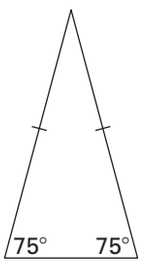
Complete the sentence with *always*, *sometimes*, or *never*.

1. An isosceles triangle is __?__ a right triangle.
2. An obtuse triangle is __?__ a right triangle.
3. A right triangle is __?__ an equilateral triangle.
4. A right triangle is __?__ an isosceles triangle.

Classify the triangle by its sides and by its angles.

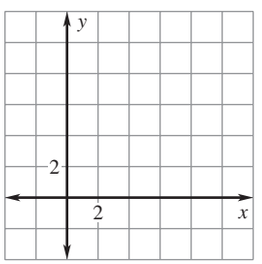
5. 

6. 

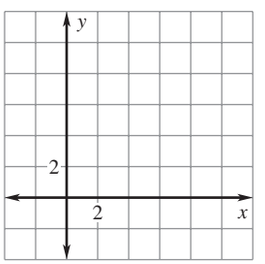
7. 

A triangle has the given vertices. Graph the triangle and classify it by its sides. Then determine if it is a right triangle.

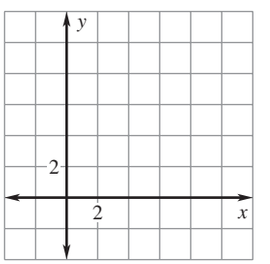
8. $A(3, 1)$, $B(3, 4)$, $C(7, 1)$



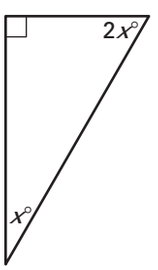
9. $A(1, 1)$, $B(4, 0)$, $C(8, 5)$

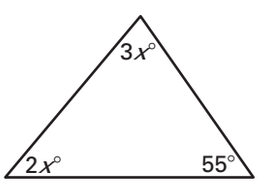


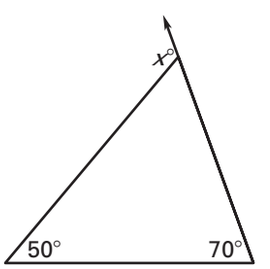
10. $A(2, 2)$, $B(6, 2)$, $C(4, 8)$



Find the value of *x*. Then classify the triangle by its angles.

11. 

12. 

13. 

Name _____ Date _____

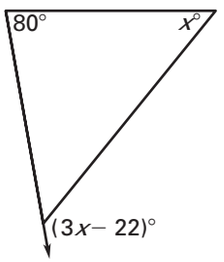
LESSON 4.1

Practice B *continued*

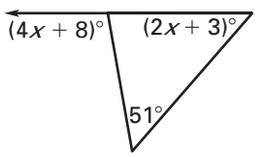
For use with pages 216–224

Find the measure of the exterior angle shown.

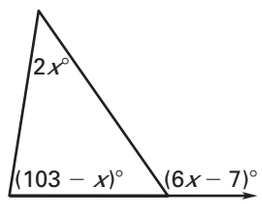
14.



15.



16.



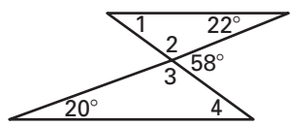
Find the measure of the numbered angle.

17. $\angle 1$

18. $\angle 2$

19. $\angle 3$

20. $\angle 4$

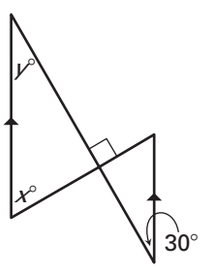


21. In $\triangle ABC$, $m\angle A = m\angle B + 30°$ and $m\angle C = m\angle B + 60°$. Find the measure of each angle.

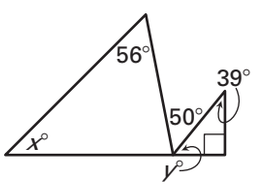
22. In $\triangle ABC$, $m\angle A = 2(m\angle B)$ and $m\angle C = 3(m\angle B)$. Find the measure of each angle.

Find the values of *x* and *y*.

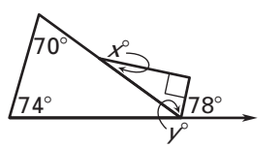
23.



24.



25.



26. Metal Brace The diagram shows the dimensions of a metal brace used for strengthening a vertical and horizontal wooden junction. Classify the triangle formed by its sides. Then copy the triangle, measure the angles, and classify the triangle by its angles.