REVIEW: Angles of Triangles
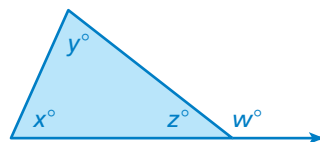
Name _____

Key Concept and Vocabulary

- The sum of the interior angle measures of a triangle is 180°.
- The measures of an exterior angle of a triangle is equal to the sum of the measures of the two nonadjacent interior angles.
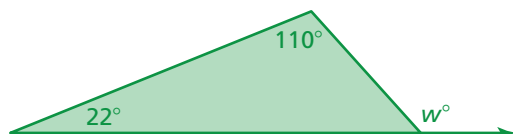
Angles

Visual Model

$$x + y + z = 180$$
$$w = x + y$$

Skill Example

1.

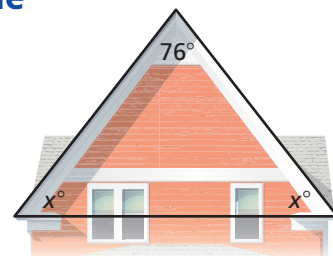$$w = 22 + 110$$
$$w = 132$$

Application Example

2. Find the value of x.

$$x + x + 76 = 180$$
$$2x + 76 = 180$$
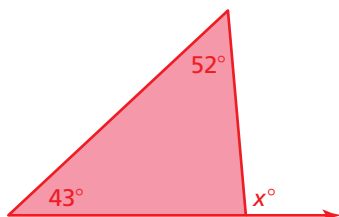$$2x = 104$$
$$x = 52$$

∴ The value of x is 52.

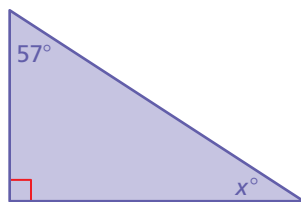## PRACTICE MAKES *PURR*-FECT®

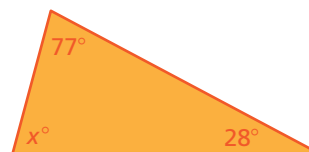*Check your answers at BigIdeasMath.com.*

Find the value of x.

3.

52°

43° $x°$

$x = $ _____

4.

57°

$x°$

$x = $ _____

5.

77°

$x°$ 28°

$x = $ _____

6.

$x°$ 34°

45°

$x = $ _____

7.

64°

$x°$ $x°$

$x = $ _____

8.

118° $2x°$

$x°$

31°

$x = $ _____
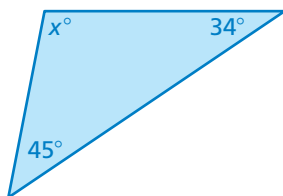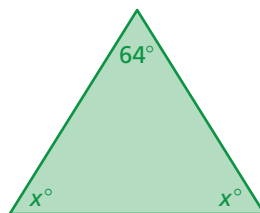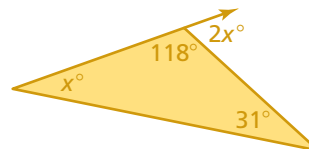
9. PARK A car travels around the park shown at the right. Find the value of x. _____

66°
51°
$x°$
1st Avenue
Short Street
Main Street