REVIEW: Triangles

Name __________________________

### Key Concept and Vocabulary

<table>
<thead>
<tr>
<th>Triangle</th>
<th>Diagram</th>
</tr>
</thead>
<tbody>
<tr>
<td>A right triangle has 1 right angle.</td>
<td><img src="right_triangle.png" alt="" /></td>
</tr>
<tr>
<td>An acute triangle has 3 acute angles.</td>
<td>![acute_triangle.png]</td>
</tr>
<tr>
<td>An obtuse triangle has 1 obtuse angle</td>
<td>![obtuse_triangle.png]</td>
</tr>
<tr>
<td>A scalene triangle has no congruent sides.</td>
<td>![scalene_triangle.png]</td>
</tr>
<tr>
<td>An isosceles triangle has at least 2 congruent sides.</td>
<td>![isosceles_triangle.png]</td>
</tr>
<tr>
<td>An equilateral triangle has 3 congruent sides. An equilateral triangle is also equiangular (3 congruent angles.)</td>
<td>![equilateral_triangle.png]</td>
</tr>
</tbody>
</table>

### Visual Model

The sum of the angle measures of a triangle is 180°.

- Draw a triangle. Label the angles A, B, and C.
- Cut out the triangle. Tear off the three corners.
- When put together, the angles A, B, and C form a straight line, which is equivalent to 180°.

### Skill Example

1. \[x + 28 + 50 = 180\]
   \[x = 102\]
   - The value of \(x\) is 102. The triangle is an obtuse, scalene triangle.

### Application Example

2. The sum of the angle measures of the sign is 180°. Find the value of \(x\).
   \[x + x + 60 = 180\]
   \[2x = 120\]
   \[x = 60\]
   - The value of \(x\) is 60.

### PRACTICE MAKES PURR-FECT™

Find the value of \(x\). Then classify the triangle in as many ways as possible.

3. \(x = \underline{55}^{\circ}\)
4. \(x = \underline{127}^{\circ}\)
5. \(x = \underline{71}^{\circ}\)

6. **GABLE** The gable of a house is shown. Find the value of \(x\).
   \[x = \underline{132}^{\circ}\]