**ML #3 - Triangle Information (Geometric Properties Unit - Math 7)**

**Part I: Types of Triangles**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **VOCABULARY TERM** | **DEFINITION** | **EXAMPLE** |
|  | **Triangle** |  |  |
| **Describe a triangle by its .** | **Right Triangle** |  |  |
| **Obtuse Triangle** |  |  |
| **Acute Triangle** |  |  |
| **Describes a triangle by its . .** | **Isosceles Triangle** |  |  |
| **Scalene Triangle** |  |  |
| **Equilateral Triangle** |  |  |

**Part II: Triangle Sum Property**

**Based on your Triangle Sum Property Investigation, fill in the statement below:**

**The sum of the interior angles of any triangle is \_\_\_\_\_\_\_\_.**

**Find the measure of the missing angles**

**Example 1: Example 2:**

35°

z°

49°

58°

x°

**Can a triangle have…**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Acute angles** | **Obtuse angles** | **Right angles** | **Yes/No AND explain** |
| **1)** | **3** |  |  |  |
| **2)** | **1** | **2** |  |  |
| **3)** | **1** | **1** | **1** |  |
| **4)** | **2** |  | **1** |  |
| **5)** | **2** | **1** |  |  |

**Part III: Side Length Investigation**

**Based on your Side Length investigation Activity, fill in the statement below:**

**The sum of the lengths of two smaller sides of a triangle must be \_\_\_\_\_\_\_\_\_\_\_than the length of the largest side is the Triangle Inequality Theorem.**

**Can the side lengths below make a triangle? How do you know?**

**58 mm, 26 mm, 34 mm \_\_\_\_\_\_\_\_\_\_\_\_**

**12 m, 8m, 20 m \_\_\_\_\_\_\_\_\_\_\_\_**

**20 in, 50 in, 20 in \_\_\_\_\_\_\_\_\_\_\_\_\_**

**18 ft, 2 ft, 12 ft \_\_\_\_\_\_\_\_\_\_\_\_\_\_**