Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #:\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_\_

**3.2A Angles of Triangles\_Classwork**

*Objective: Find the measures of interior and exterior angles of triangles (CCSS: 8.G.5)*

*HW: (3.2) p. 114 #1 – 3 all, 5 – 9 odd, 12 – 15 all (solutions on p. A17)*

|  |
| --- |
| **LESSON OPENER:** Work with a partner to find the missing angle measuresThe sum of all 3 **interior angles** in a **triangle** is 180°$m∠1=\\_\\_\\_\\_\\_\\_$$m∠2=$$\\_\\_\\_\\_\\_\\_$$m∠3=\\_\\_\\_\\_\\_\\_$**What do you notice about the sum of two interior angles and one exterior angle?** |

*Read Examples 1 – 3 (p 112 – 4). Then do the problems below*

|  |  |
| --- | --- |
| **Example 1:** Find the value of x.  | **Example 2:** Find the value of x. |
| **Example 3:**Find the measure of the exterior angle (x).  | **Example 4:**1. Find the value of “a” \_\_\_\_\_\_\_\_\_
2. Find the measure of the exterior angle. \_\_\_\_\_\_\_

 |
| **Example 5:**Find the measure of the exterior angle (x).  | **Example 6:**1. Find the value of “a” \_\_\_\_\_\_\_\_\_
2. Find the measure of the exterior angle. \_\_\_\_\_\_\_

 |
| **Example 7:** A car travels around the park shown below.1. What is the value of “x”? \_\_\_\_\_\_\_\_\_
2. What are the interior angle measurements of the park? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 | **Example 8:**An airplane leaves from Miami and travels around the Bermuda Triangle. 1. What is the value of “x”? \_\_\_\_\_\_\_\_\_
2. What are the interior angle measurements of the Bermuda Triangle? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Video: <https://www.youtube.com/watch?v=nvrgkKIVvnU>

<https://www.youtube.com/watch?v=DI_Bh6XmINU>

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_ Date: \_\_\_\_\_\_\_

**EXIT SLIP 3.1B**

Use the figure to find all of the numbered angles. Explain your reasoning.

|  |  |
| --- | --- |
|  | $∠1= becuase $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_$∠2= becuase $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_$∠3= becuase $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_$∠4= becuase $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_$∠5= becuase $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_$∠6= becuase $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_$∠7= becuase $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_ Date: \_\_\_\_\_\_\_

**EXIT SLIP 3.1B**

Use the figure to find all of the numbered angles. Explain your reasoning.

|  |  |
| --- | --- |
|  | $∠1= becuase $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_$∠2= becuase $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_$∠3= becuase $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_$∠4= becuase $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_$∠5= becuase $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_$∠6= becuase $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_$∠7= becuase $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |