$\qquad$
In Class Notes

Angles inside a polygon are called $\qquad$ -

When the sides of the polygon are extended, other angles are formed. The angles outside the polygon that are adjacent to the interior angles are called $\qquad$ .


Interior Angles


Exterior Angles

## Interior Angle Measures of a Triangle

Words The sum of the interior angle measures of a triangle is $180^{\circ}$.

Algebra $x+y+z=180$


Ex:) Find the measures of the interior angles of each triangle.
Notes:
a.

b.

a.

b.


## Exterior Angle Measures of a Triangle

Words The measure of an exterior angle of a triangle is equal to the sum of the measures of the two nonadjacent interior angles.


Algebra $z=x+y$

Ex:) Find the measure of the exterior angle.
Notes:
a.

b.



Ex:) An airplane leaves Miami and travels around the Bermuda
Notes:
Triangle as shown in the diagram. What is the measure of the interior angle at Miami?


OYO:) The Historic Triangle in Virginia connects Jamestown, Williamsburg, and Yorktown. The interior angle at Williamsburg is $120^{\circ}$. The interior angle at Jamestown is twice the measure of the interior angle at Yorktown. Find the measures of the interior angles at Jamestown and Yorktown.

