

Geometry 3-4 Notes  
Polygon Angle-Sum Theorems

1. **Polygon**: A closed plane figure with at least three sides that are segments. No gaps, no curved lines. The sides only intersect at their endpoints.

Examples of Polygons

Non-Polygons

2. **Concave**: \_\_\_\_\_

Sample Pictures:

3. **Convex**: \_\_\_\_\_

Sample Pictures:

4. **Names of Polygons** and their number of sides.

Triangle	_____	Quadrilateral	_____	Pentagon	_____
Hexagon	_____	Heptagon	_____	Octagon	_____
Nonagon	_____	Decagon	_____	Dodecagon	_____
n-gon	_____	Example: 32-gon: 32 sides; 44-gon: 44 sides.			

5. **Polygon Angle Sum Theorem**: \_\_\_\_\_

6. **Polygon Exterior Angle Sum Theorem**: The exterior angles of any polygon add up to 360 degrees.

7. **Regular Polygon**: \_\_\_\_\_