# Interior Angle <br> ( triangle/polygon angle sum <br> theorem) 

-Triangle sum theorem: The sum of the three angles in any triangle sum to 180 degrees.

(formula for the triangle)
-Polygon Sum Theorem: The sum of the number of angles a polygon has, will depend on its total degrees.

| Number of <br> Sides | Polygon <br> Name | Number of <br> Triangles Formed | Interior Angle <br> Sum Measure |
| :---: | :---: | :---: | :---: |
| 3 | Triangle | 1 | $180^{\circ}$ |
| 4 | Quadrilateral | 2 | $360^{\circ}$ |
| 5 | Pentagon | 3 | $540^{\circ}$ |
| 6 | Hexagon | 4 | $720^{\circ}$ |
| 7 | Heptagon | 5 | $900^{\circ}$ |
| $\vdots$ | $\vdots$ | $\vdots$ | $\vdots$ |
| $n$ | $n$-gon | $(n-2)$ | $(n-2) \cdot 180^{\circ}$ |


(formula for the polygon)

## -Real life use of polygons


-Real life use of triangle


