## Interior Angles

Interior angles: The angles inside of a polygon formed by adjacent sides.


When they paint the crosswalk they have to measure the interior angles to make sure that each square in the crosswalk is the same size.


This square's interior angles are marked with with arrows.

Triangle angle sum theorem: The sum of the interior angles of triangles equals $180^{\circ}$.

This triangles angles


Real Life Uses: These are used for architecture for example these pyramids have 4 triangular faces that the angles add up to 180 degrees. Another example would be the triangle musical instrument has angles that add up to 180 degrees.

Polygon angle sum theorem: If a convex polygon has n sides, then its interior angle sum is given by the equation $S=(n-2) \times$ $180^{\circ}$


Real Life Uses: This is used for architecture anything that is polygon shaped for example the pentagon building before being built was planned on paper and they had to use this formula to find out what the interior angle sum had to equal.

This triangle has 4 sides so the equation

$$
\text { is } S=(4-2) \times 180^{\circ} \text {, then you would get }
$$

$\mathrm{S}=2 \times 180^{\circ}$ which would equal $360^{\circ}$
And that would be the answer.

