## Quadrilaterals angle sum property

Before talking about the **quadrilaterals angle sum property**, let us recall what angles and quadrilateral is. The angle is formed when two line segment joins at a single point. An angle is measured in degrees (°). Quadrilateral angles are the angles formed inside the shape of a quadrilateral. The quadrilateral is four-sided polygon which can have or not have equal sides. It is a closed figure in two-dimension and has non-curved sides. A **quadrilateral** is a polygon which has 4 vertices and 4 sides enclosing 4 angles and the sum of all the angles is 360°. When we draw a draw the diagonals to the quadrilateral, it forms two triangles. Both these triangles have an angle sum of 180°. Therefore, the **total angle sum of the quadrilateral is 360°**. Angle sum is one of the properties of quadrilaterals. In this article, w will learn the rules of angle sum property.



Proof: In the quadrilateral ABCD,

- $\angle ABC$ ,  $\angle BCD$ ,  $\angle CDA$ , and  $\angle DAB$  are the internal angles.
- AC is a diagonal
- AC divides the quadrilateral into two triangles,  $\triangle ABC$  and  $\triangle ADC$