**Properties of Parallelograms**

**Definition of Quadrilateral –** A plane figure with 4 sides and 4 angles.

The **Sum of the Interior Angles** in a quadrilateral is 360° (like the sum of angles in a Δ is 180°)

**Definition of Parallelogram –** A parallelogram is a quadrilateral with 2 pair of opposite parallel sides.

There are 4 other properties of parallelograms that you need to be *very* familiar with. These are true for every parallelogram:

**Property 1 –** In a parallelogram, the opposite sides are congruent (not just parallel).

**Property 2 –** In a parallelogram, the opposite ∠s are congruent.

**Property 3 –** In a parallelogram, the consecutive ∠s are supplementary (because of || lines)

 *m*∠A + *m*∠B = 180°

 *m*∠A + *m*∠D = 180°

 …

**Property 4** – In a parallelogram, the diagonals bisect each other (intersect at their midpoints).