Unit 29   Triangles and Other Polygons

1. A **polygon** is a closed figure of 3 or more sides.

2. Triangles
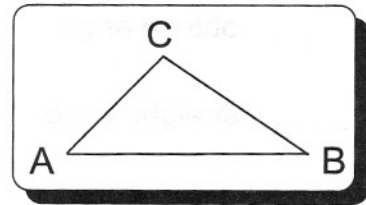
    A. A **triangle** is a closed figure with three sides.

    B. Triangle ABC has three sides: AB, BC, and CA.

    C. Triangle ABC has these three angles:

    $\angle$ A or $\angle$CAB

    $\angle$ B or $\angle$ABC

    $\angle$ C or $\angle$BCA

    Note: The vertex of an angle is always the middle letter.

    D. The sum (total) of the 3 angles of any triangle is 180°.

3. Special triangles

Right Triangle has a right angle	Equilateral and Equiangular all sides and all angles are equal	Isosceles 2 equal sides and 2 equal angles	Scalene all sides are unequal

4. **Quadrilaterals** are polygons with 4 sides.
    The sum of the angles of any quadrilateral is 360°.

Square opposite sides parallel all sides are equal all angles are 90°	Rectangle opposite sides parallel opposite sides equal all angles are 90°	Parallelogram opposite sides parallel opposite sides equal opposite angles equal	Rhombus opposite sides parallel all sides are equal opposite angles equal

5. Other interesting polygons
    Regular polygons have equal sides.

Trapezoid exactly one pair of parallel sides	Isosceles Trapezoid a quadrilateral with one pair of parallel sides and one pair of equal sides	Pentagon five sides	Hexagon six sides	Octagon eight sides