Some Special Parallelograms

In Rhombus ABCD,

AB = BC= CD=DA (All the sides of a rhombus are equal)

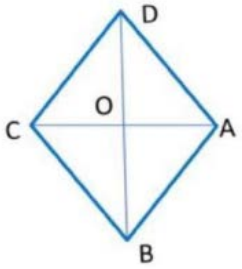
∠A = ∠C and ∠B =∠D (Opposite angel are equal)

AO = OC and BO = OD (Diagonals bisect each other)

∠AOB = ∠BOC = 90° (diagonals bisect each other at right angles)

Rhombus:

- It is a parallelogram with sides of equal length.
- Opposite angles are equal.
- Diagonals bisect each other at right angles.



In rectangle ABCD

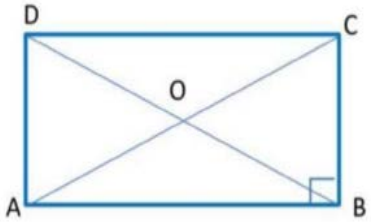
∠A = ∠B = ∠C = ∠D = 90°

(Each of the rectangle is a right angle)

AC = BD (Diagnostic of a rectangle are equal)

A Rectangle:

- A rectangle is a parallelogram whose each angle is a right angle.
- The diagonals of a rectangle are equal and bisect each other perpendicularly



In square ABCD,

$\angle A = \angle B = \angle C = \angle D = 90°$

(Each angle of a square is a right angle)

ACBD (Diagonals of a rectangle are equal)

$\angle AOB = \angle BOC = 90°$ (Diagonals bisect each other at right angles)

A Square:

- A rectangle with equal sides.
- The diagonals are of equal length.
- The diagonals are equal.
- The diagonals bisect each other perpendicularly.