Squares and Rectangles

Square and Rectangles

A square is a four-sided closed figure (quadrilateral) where:

- All sides are equal
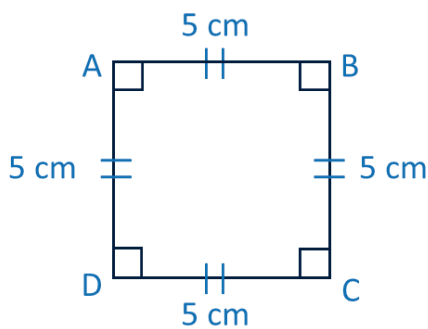- All angles are right angles (90°)

Rectangle:

A rectangle is also a four-sided closed figure, but:

- Opposite sides are equal
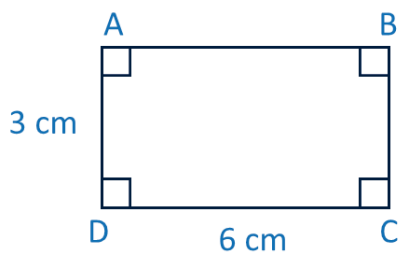- All angles are right angles (90°)

Examples:

- **Drawing a square of 5 cm side**

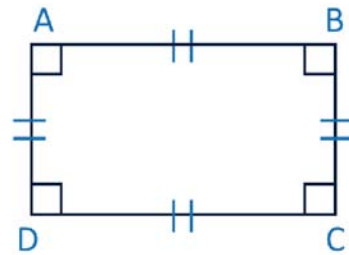 Use ruler and compass to draw 4 equal sides and 4 right angles
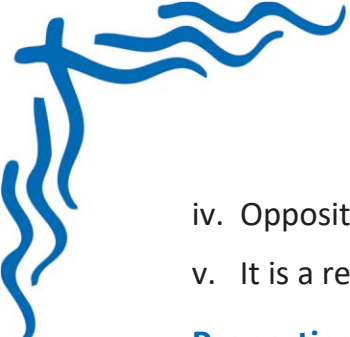
- **Drawing a rectangle of 6 cm × 3 cm**

  Draw 6 cm and 3 cm sides, with all angles 90°

Properties of a Square:

i. All four sides are equal

ii. All four angles are 90°

iii. Diagonals are equal and bisect each other at 90°

iv. Opposite sides are parallel

v. It is a regular quadrilateral

Properties of a Rectangle:

i. Opposite sides are equal and parallel

ii. All four angles are 90°

iii. Diagonals are equal but do not bisect at 90°

iv. It is also a parallelogram

v. Every square is a rectangle, but not every rectangle is a square

Summary:

- **Square:** 4 equal sides, all angles 90°
- **Rectangle:** Opposite sides equal, all angles 90°
- Both are quadrilaterals used in rooms, books, tiles, etc.
- Use ruler and set square/protractor for neat construction

  Example: Draw a rectangle of 7 cm length and 4 cm breadth