

Practical Geometry

Condition for Uniquely drawing the Triangle

We need three measurements for Uniquely drawing the Triangle

Three Measurement could be (Two sides, One Angle), (three sides) and (2 angles, 1 side).

Condition for Uniquely drawing the Quadrilaterals

Five measurements can determine a quadrilateral uniquely

Here is some the measurement which will help us uniquely draw the quadrilaterals

- 1) A quadrilateral can be constructed uniquely if the lengths of its four sides and a diagonal is given.
- 2) A quadrilateral can be constructed uniquely if its two diagonals and three sides are known.
- 3) A quadrilateral can be constructed uniquely if its two adjacent sides and three angles are known.
- 4). A quadrilateral can be constructed uniquely if its three sides and two included angles are given
- 5) Some special property can help in uniquely drawing the quadrilaterals.

Example

Square with side given

Rectangle with side given

Rhombus with diagonals given