CHAPTER 4

Practical Geometry

To construct a rhombus when the diagonals are given:

The diagonals of a rhombus bisect each other at a right angles.

Example:

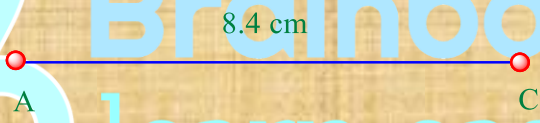
Construct a rhombus ABCD given AC = 8.4 cm and BD = 5.6 cm.

Sol.

Draw a rough figure and label it with the given measurements as shown. Follow the given steps to construct the quadrilateral.

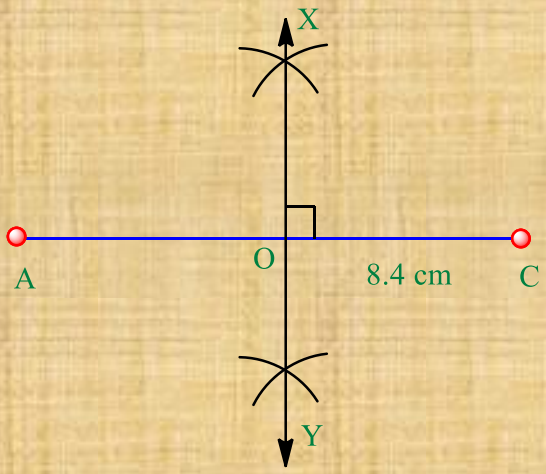
Step I:

Draw a line segment AC = 8.4 cm



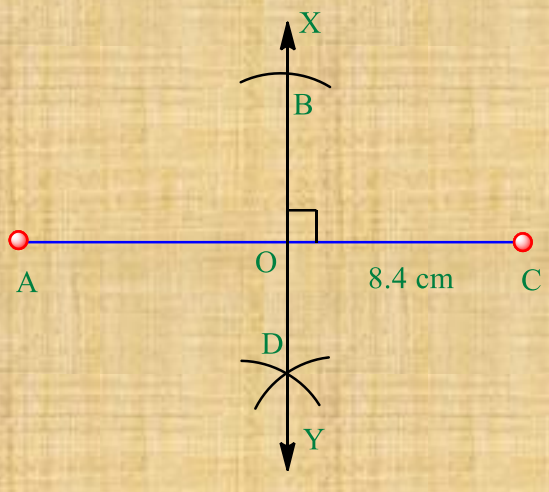
Step II:

Construct the perpendicular bisector xy on AC. Let the point of bisection of PR be ‘O’.



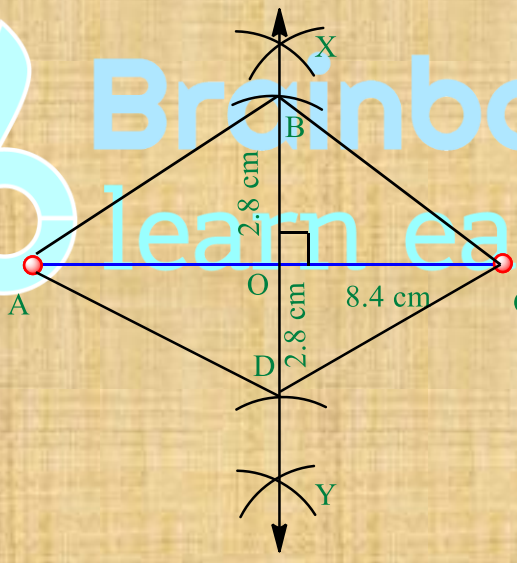
Step III:

With ‘O’ as centre and radius equal to half BD (5.6/2 = 2.8 cm), draw an arc to cut XY above ‘O’ at ‘B’ and another are below ‘O’ at ‘D’.



Step IV:

Join AB, BC, CD and AD.



Thus ABCD formed is the required rhombus.