

CHAPTER 13

CONSTRUCTIONS

More Questions for Practice

- Using a 15 cm scale, construct a line segment of length:
(a) 6 cm (b) 4 cm (c) 3.5 cm (d) 5.2 cm
- Using a scale and a compass, construct:
(a) an angle AOB of measure 90° .
(b) an angle AOC of measure 45° .
(c) an angle BOD of measure $22\frac{1}{2}^\circ$.
- Using a scale and a compass, construct:
(a) an angle XOY of measure 60° .
(b) an angle ZOY of measure 120° .
(c) an angle POY of measure 90° .
- Draw a line segment AB of length 5 cm. At A, construct an angle of measure 60° ; and at B, an angle of measure 90° . Find the measure of angle C of the triangle ABC so formed.
- Draw a line segment XY. From the points A and B draw lines perpendicular to \overline{XY} .
- Draw a circle with centre O. Mark any chord PQ of this circle. Draw perpendicular bisector AB of the chord PQ. Find if AB passes through O.
- Draw a square ABCD. Join its diagonal AC. From D, draw a perpendicular to the diagonal AC. Does it pass through A?
- Sketch an angle, say AOB, of any measure. Divide it equally into four parts.
- Sketch an angle MNP of any measure. Construct another angle XYZ such that $m\angle XYZ = m\angle MNP$.
- Using a ruler and a compass, construct an equilateral triangle ABC. Construct perpendicular bisectors of \overline{AB} , \overline{BC} and \overline{AC} . Do these meet at a point? Draw a circle, taking this meeting point as its centre, passing through A, B and C.

