## Chapter 12: Geometrical Constructions

## Ex-12(A)-Page 305

Q1. Draw a line segment $A B$ of length 9.5 cm . Construct the perpendicular bisector of $A B$.


STEPS: (i) Draw a line segment of length 9.5 cm using a ruler and name as AB.
(ii) Adjust the arm of compass more than half of the length of the drawn line (ie; greater than 5 cm approx.) and cut two arcs from the point $A$ on top and bottom of the line.
(iii) Use the same radius and do the same from B.
(iv) Join the points got on top and bottom using a ruler.
(v) Line $L$, is the required perpendicular bisector of $A B$.

Q2. Draw an angle BAC of $56^{\circ}$. Construct the angle bisector of BAC.


Q

Steps: (i) Draw angle $56^{\circ}$ using protractor and name it as BAC.
(ii) With A as centre and a suitable radius, draw an arc to cut AC and $A B$ at points $P$ and $Q$ respectively.
(iii) With P as centre, and use any other radius, draw an arc and do the same from $Q$ to cut the previous drawn arc at $X$.
(iv) Join the points A and X and AX is the required angle bisector.

