

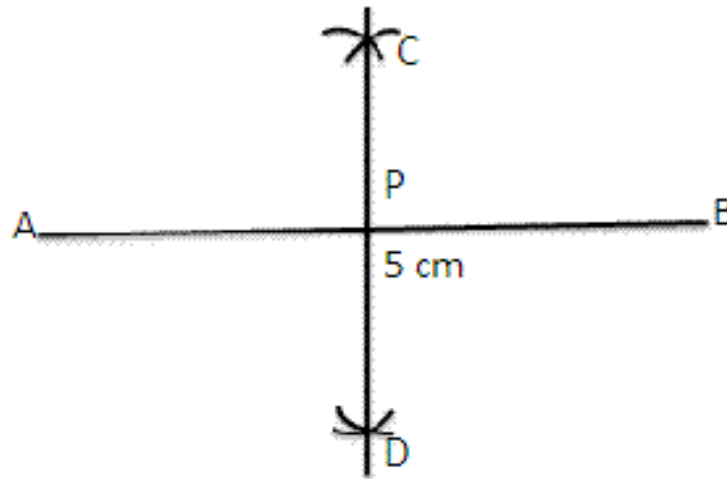


Exercise 12A

Question 1:

Steps of Construction:

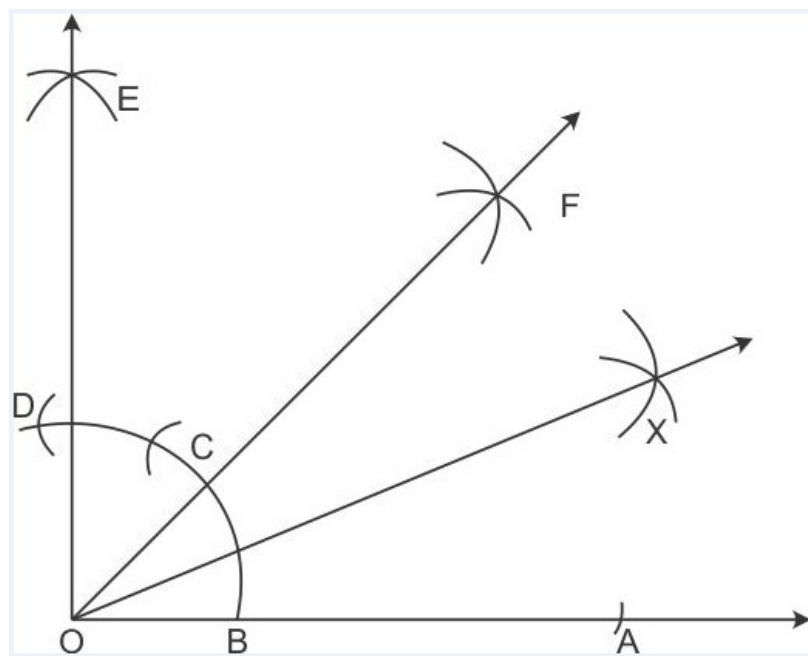
- (i) Draw a line segment $AB = 5 \text{ cm}$
 - (ii) With A as centre and radius equal to more than half of AB, draw two arcs, one above AB and the other below AB.
 - (iii) With B as a centre and the same radius draw two arcs which cuts the previously drawn arcs at C and D.
 - (iv) Join CD, intersecting AB at point P.
- \therefore CD is the perpendicular bisector of AB at the point P.



Question 2:

Step of Construction:

- (i) Draw a line segment OA.
- (ii) At A, draw $\angle AOE = 90^\circ$, using ruler and compass.
- (iii) With B as centre and radius more than half of BD, draw an arc.
- (iv) With D as centre and same radius draw another arc which cuts the previous arc at F.
- (v) Join OF. $\therefore \angle AOF = 45^\circ$.
- (vi) Now with centre B and radius more than half of BC, draw an arc.
- (vii) With centre C and same radius draw another arc which cuts the previously drawn arc at X.
- (viii) Join OX. \therefore OX is the bisector of $\angle AOF$.



***** END *****