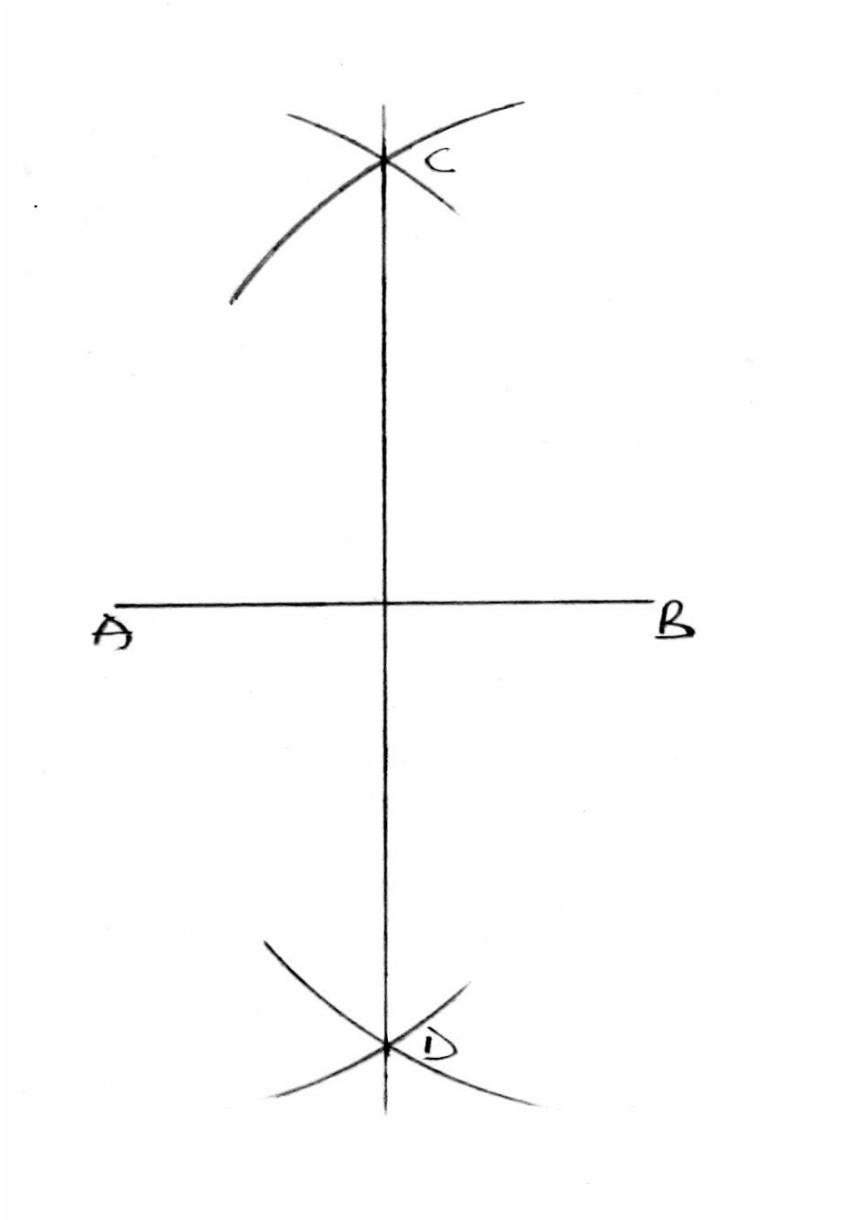
CONSTRUCTION OF BISECTOR LINES

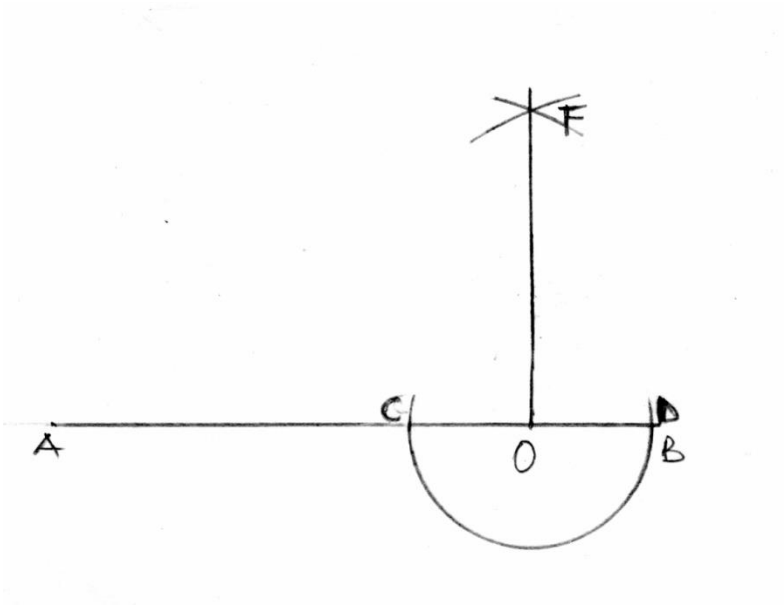
Bisection is the dividing of an angle into two equal parts. We usually or generally bisect an angle by using any particular radius to cut the lines that forms the angles from their intersection points; thereafter, a radius bigger than the midpoint of the length between the points should be selected. With that radius, arcs should be drawn from the intersection points. The drawn arcs would intersect at a point that bisects or divide the angle into two equal parts.

To construct a bisector line to a given line

1. Draw the given line AB
2. With centre A and any radius greater than half AB draw arcs above and below the line.
3. With centre B draw arcs of the same radius to cut the previous ones.
4. The line CD should be draw through the intersection of the arcs. CD is a bisector of AB at point O.


C
A
B
D

To construct a perpendicular line at a given point on a straight line

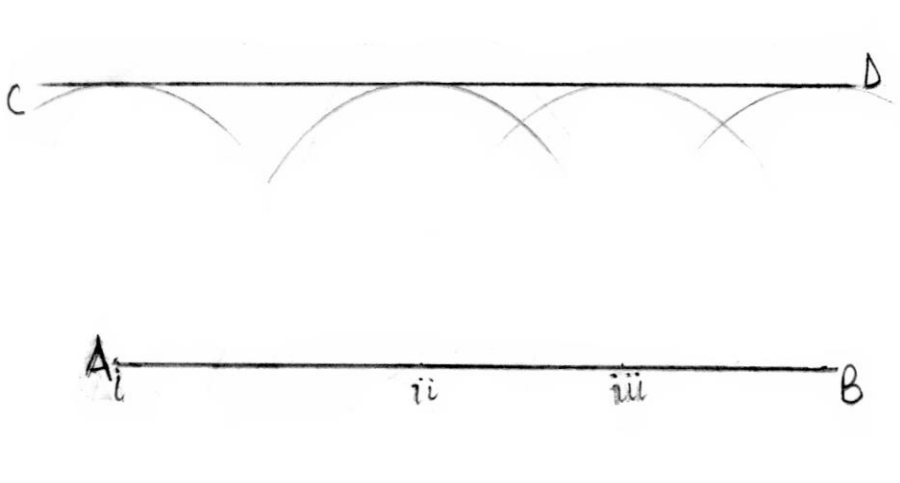


1. Draw the given line AB.
2. Mark the given point O.
3. With centre O and any convenient radius draw the semicircle CD.
4. With C and D and any convenient radius draw arcs to intersect at F.

A line FO should be drawn to join F and centre O.
The line FO is perpendicular to AB at point O.

To draw a parallel line of a given line

1. Draw the line AB. Mark points i and iii near the ends to line and point ii about the centre of the line.
2. With centres i, ii, iii, and radius equal to the distance away of the required parallel line draw arcs.
3. Draw line CD to cross the tops of the arc line CD is parallel to line AB.



To construct a bisector to a given angle

1. Draw the given angle BAC.
2. With centre A and any convenient radius draw an arc to cut AB at D and AC at E.
3. With centre D and any radius draw an arc.
4. With centre E and the same radius draw an arc to intersect the previous one at F.
5. Join AF. This is the bisector.

