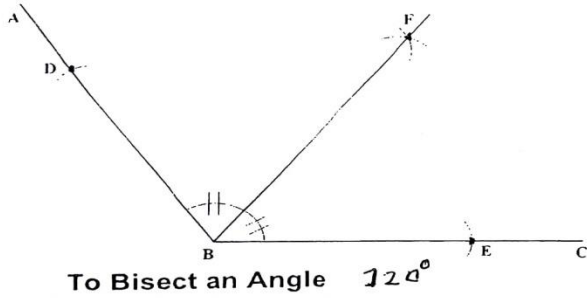
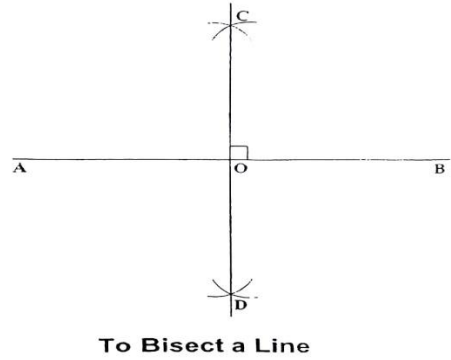


Topic 4 Geometrical Construction

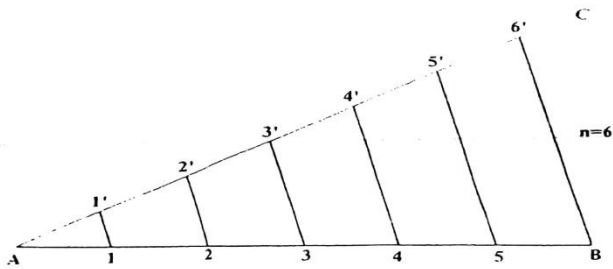
(1) Bisect a given angle $\angle ABC = 120^\circ$



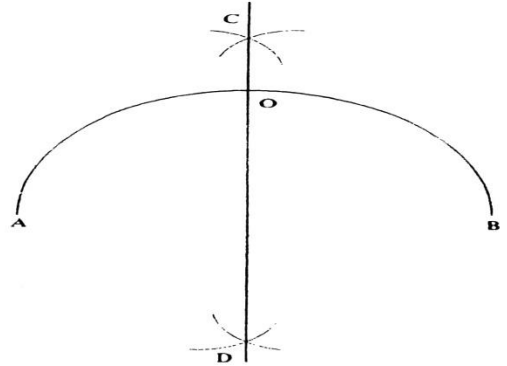
(2) (a) Bisect a line or arc



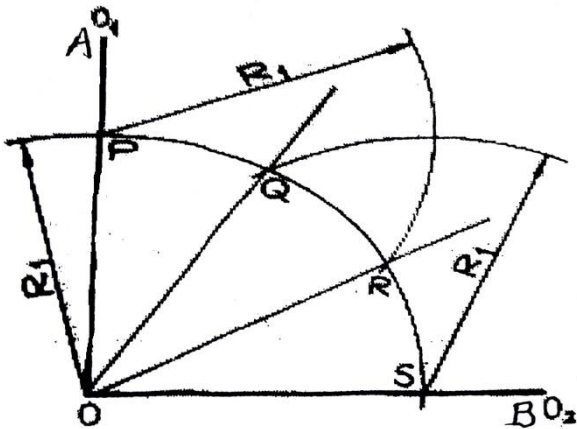
(3) Divide a line AB = 70 mm long into six equal parts



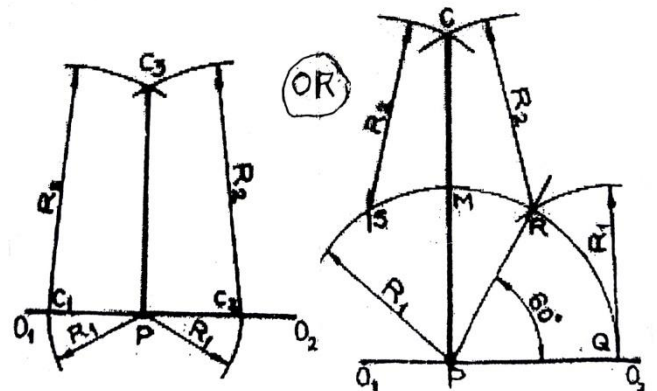
(b) Bisect an arc.



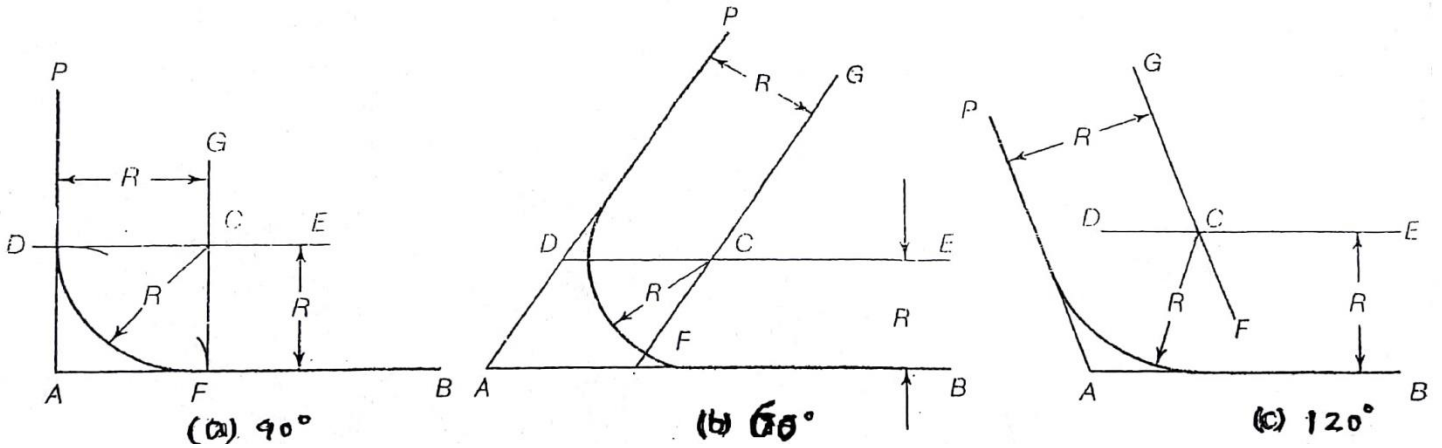
(4) Trisect a given right angle AOB



(5) To construct a perpendicular at a point P on a given line.

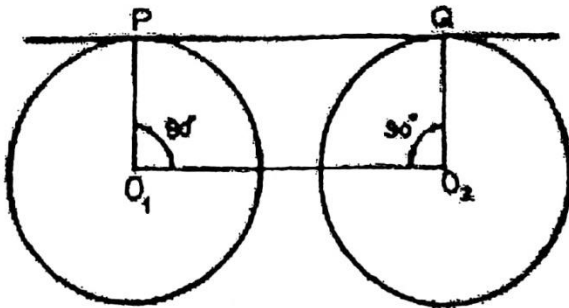


(6) Draw an arc of 20mm radius touching two sides of angles (1) 90° (2) 60° (3) 120°

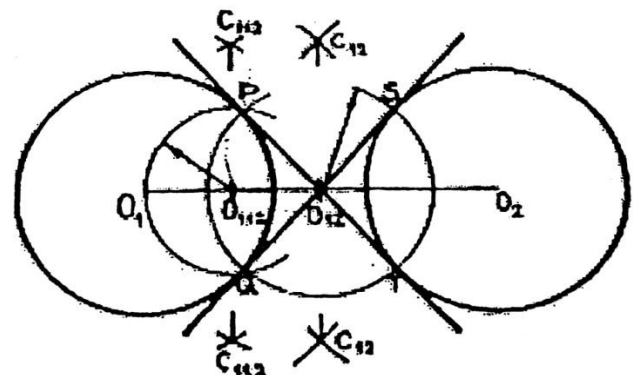


(7) Draw common tangent to equal circle of 35 mm radius and centre distances of both is 100 mm

(a) Externally & (b) Internally

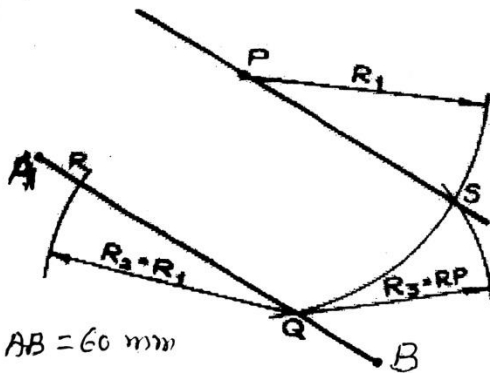


EXTERIOR TANGENT TO TWO EQUAL CIRCLES



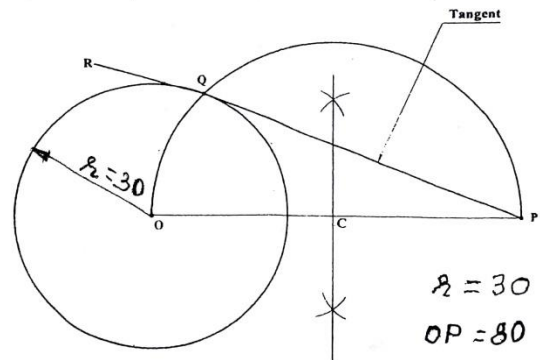
INTERIOR TANGENT TO TWO EQUAL

(8) Draw a parallel line passing through the point 'p' to a given Line AB 60 mm Long.



AB = 60 mm

(9) Draw a circle of radius 30 mm. Draw tangent to a circle at (1) any point A on it (2) from point P outside 80 mm away from centre.



$R = 30$

$OP = 80$

(10) Draw a circle passing through three non-linear points (O_1, O_2, O_3) OR
To find the centre of a given arc O_1, O_2, O_3 .

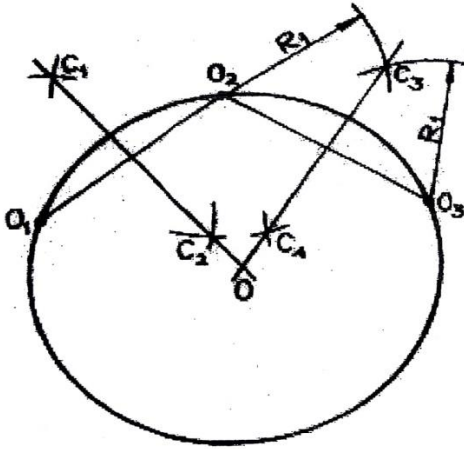


FIG. : 4.12

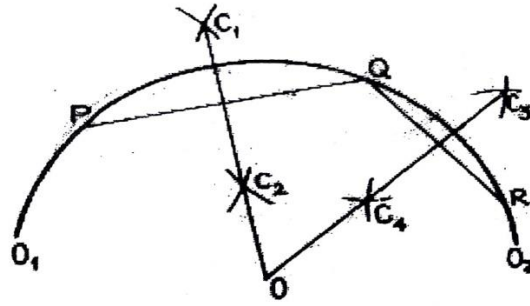


FIG. 4.12 A : ARC THROUGH THREE NON-LINEAR POINTS AND CENTRE OF AN ARC