

Figure 2.37(g)

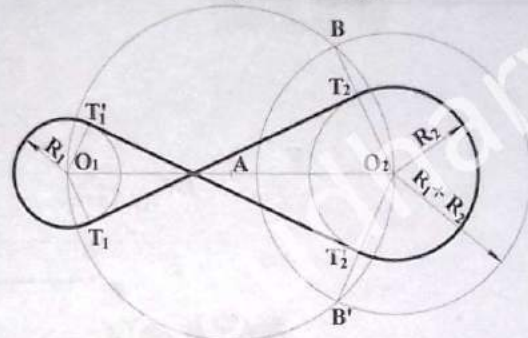


Figure 2.37(h)

### 2.3.8 To Draw a Reverse Curve (Ogee Curve)

- AB and CD are the given lines. (Figure 2.38(a))
- Join B and C and take any point E on the line BC. (Figure 2.38(b))
- Draw perpendicular bisectors of line segments BE and EC. (Figure 2.38(c))
- Draw perpendicular from point B such that it intersects the perpendicular bisector of BE at point F. Similarly draw perpendicular from point C such that it intersects the perpendicular bisector of EC at point G. (Figure 2.38(d))
- Draw an arc BE with F as center and FB as radius. Similarly draw another arc EC with G as center and GC as radius. (Figure 2.38(e))

A \_\_\_\_\_ B

C \_\_\_\_\_ D

Figure 2.38(a)

A \_\_\_\_\_ B

E

C \_\_\_\_\_ D

Figure 2.38(b)

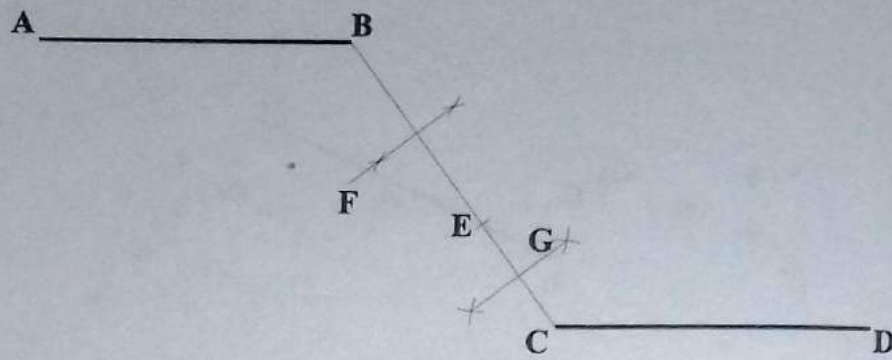


Figure 2.38(c)

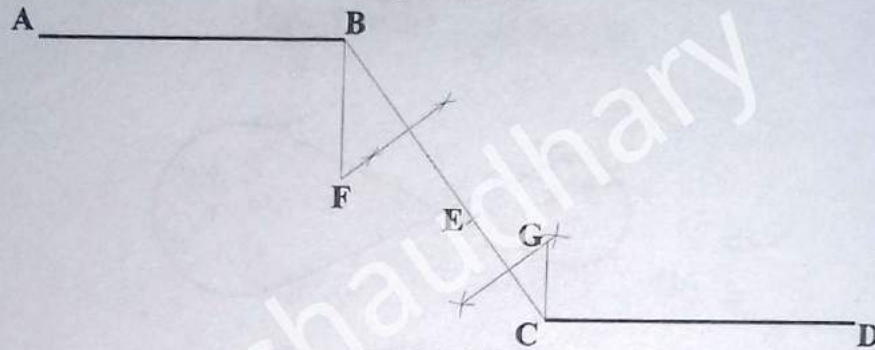


Figure 2.38(d)

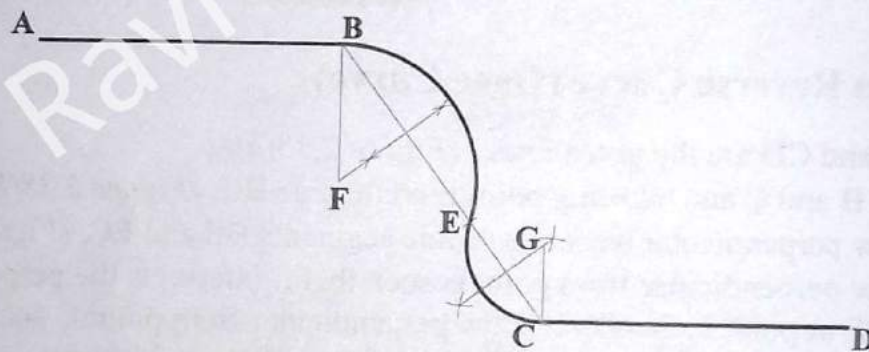


Figure 2.38(e)

### 2.3.9 To Determine the Circumference of a Circle

- Draw given circle and its horizontal and vertical diameters AB and CD intersecting each other at point O. (Figure 2.39(a))
- Draw a tangent to the circle passing through point D and mark point E on the tangent line such that DE is equal to 3 times the diameter of the given circle. (Figure 2.39(b))
- With B as center and radius equal to that of the circle, draw an arc intersecting the given circle at point F. (Figure 2.39(c))
- Draw straight line passing through F and perpendicular to the vertical diameter CD and mark the foot of perpendicular as point G. (Figure 2.39(d))
- Join GE to get the required circumference of the circle. (Figure 2.39(e))