ENGINEERING GRAPHICS

TOPIC : CURVE

Lecture No :
5

ENGINEERING CURVES

ELLIPSE

1. Concentric Circle Method
2. Rectangle Method
3. Oblong Method
4. Arcs of Circle Method
5. Rhombus Method
6. Basic Locus Method
   (Directrix – focus)

PARABOLA

1. Rectangle Method
2. Method of Tangents
   (Triangle Method)

HYPERBOLA

1. Rectangular Hyperbola
   (coordinates given)
2. Rectangular Hyperbola
   (P-V diagram - Equation given)
3. Basic Locus Method
   (Directrix – focus)

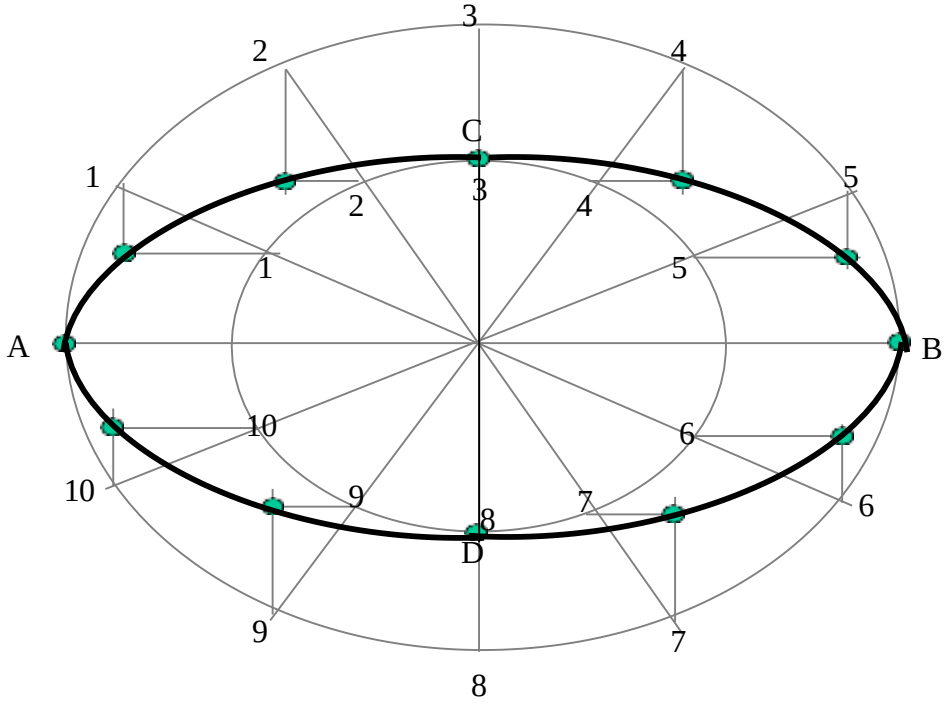
ELLIPSE

BY CONCENTRIC CIRCLE METHOD

Problem

Draw ellipse by ***concentric circle method****.*

Take major axis 90 mm and minor axis 60 mm long.

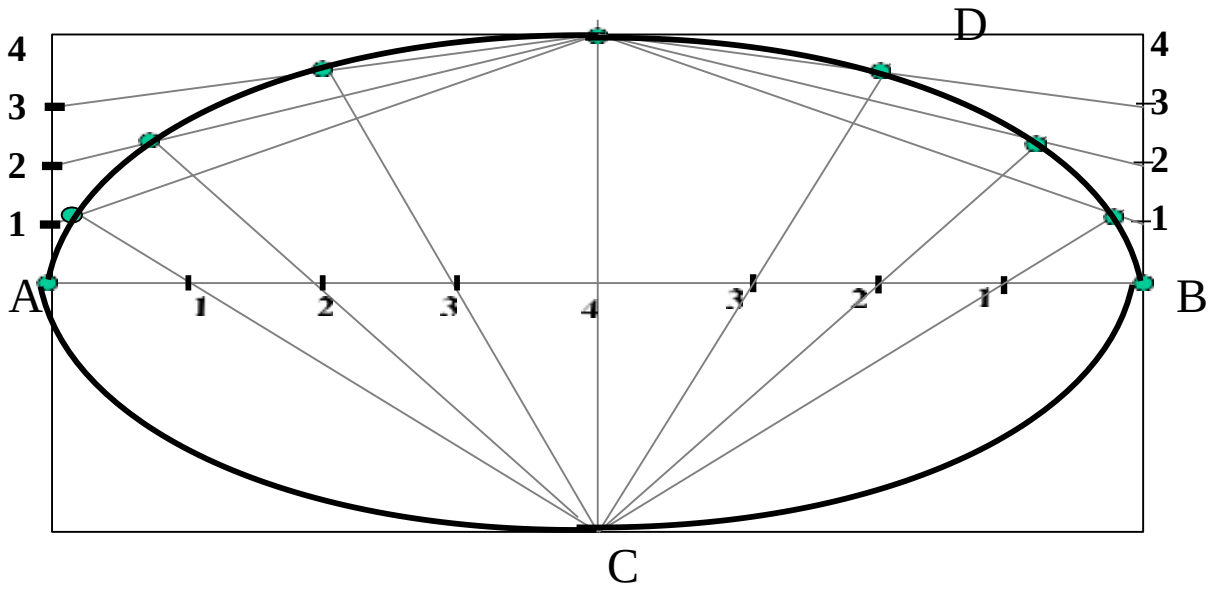


ELLIPSE

BY RECTANGLE METHOD

Problem

*Draw ellipse by **Rectangle** method.*
Take major axis 90 mm and minor axis 60 mm long.



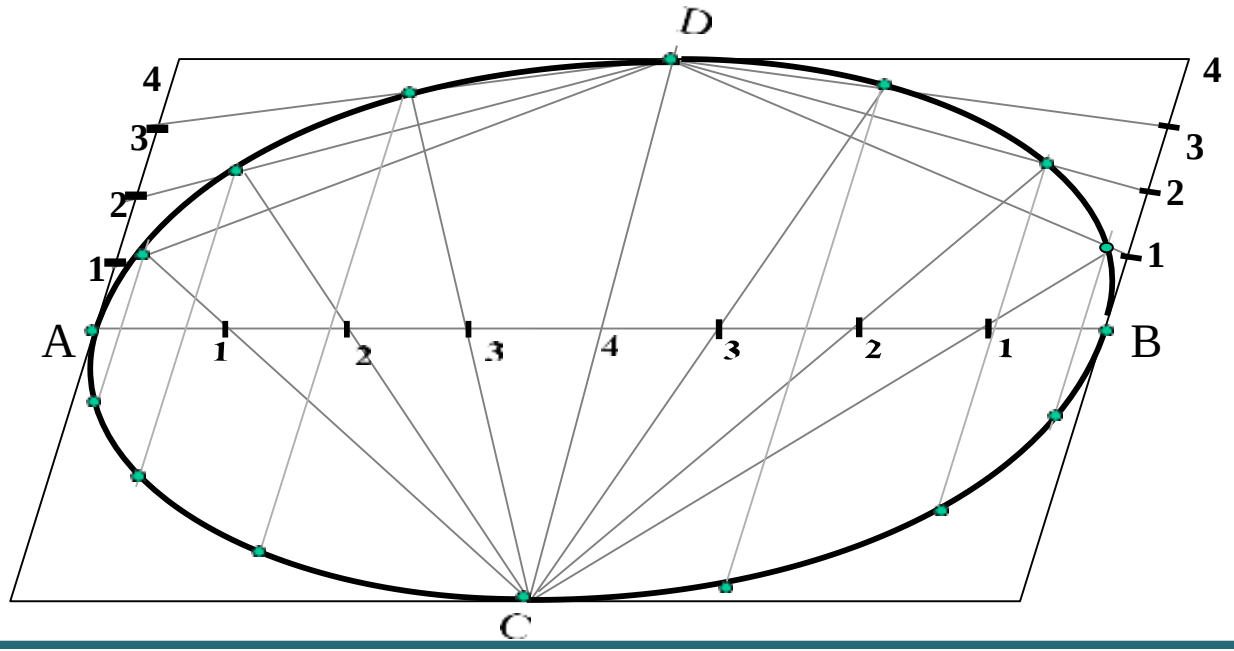
ELLIPSE

BY OBLONG METHOD

Problem

Draw ellipse by ***Oblong method.***

Draw a parallelogram of 90 mm and 60 mm long sides with included angle of 70^0.Inscribe Ellipse in it.

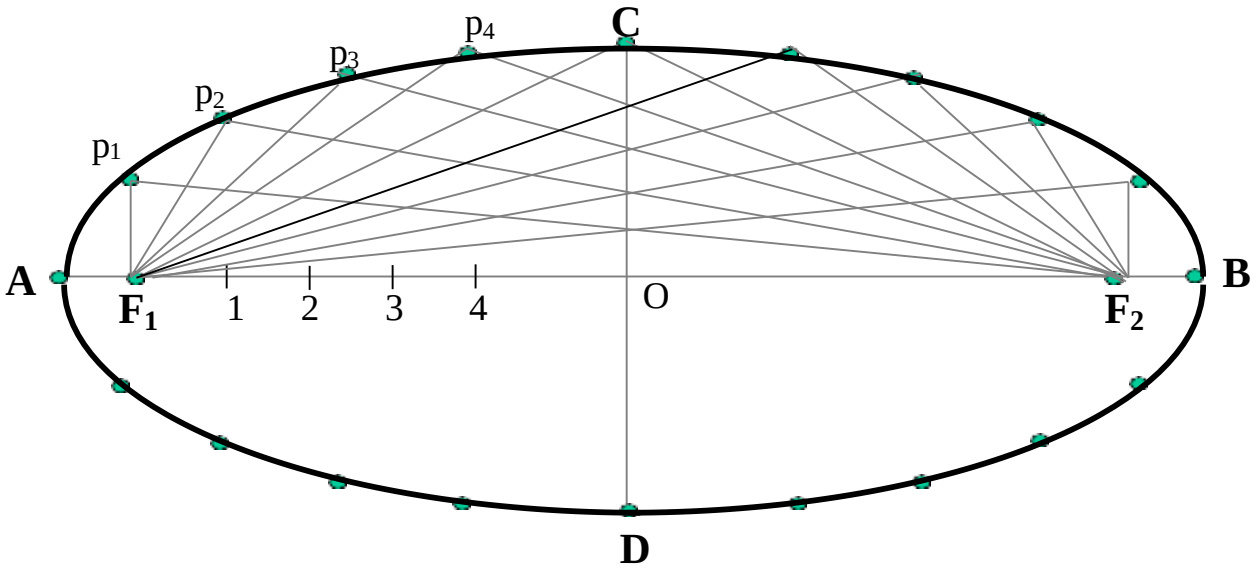


ELLIPSE

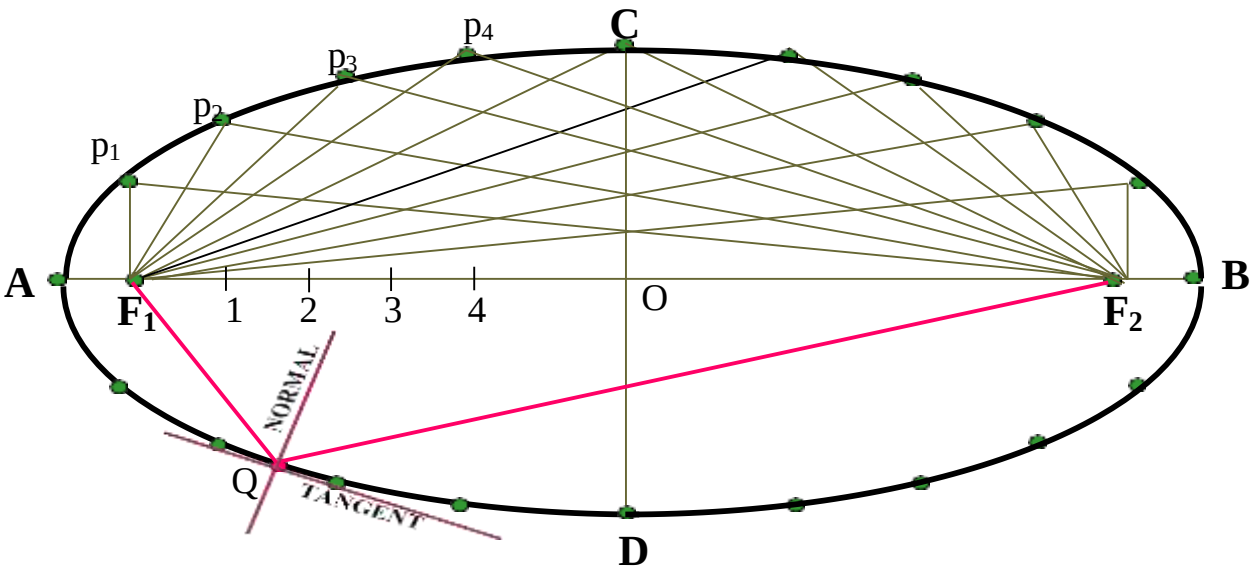
BY ARCS OF CIRCLE METHOD

PROBLEM

MAJOR AXIS AB & MINOR AXIS CD ARE 90 AMD 60MM LONG RESPECTIVELY DRAW ELLIPSE BY ARCS OF CIRLES METHOD.



ELLIPSE
TANGENT & NORMAL

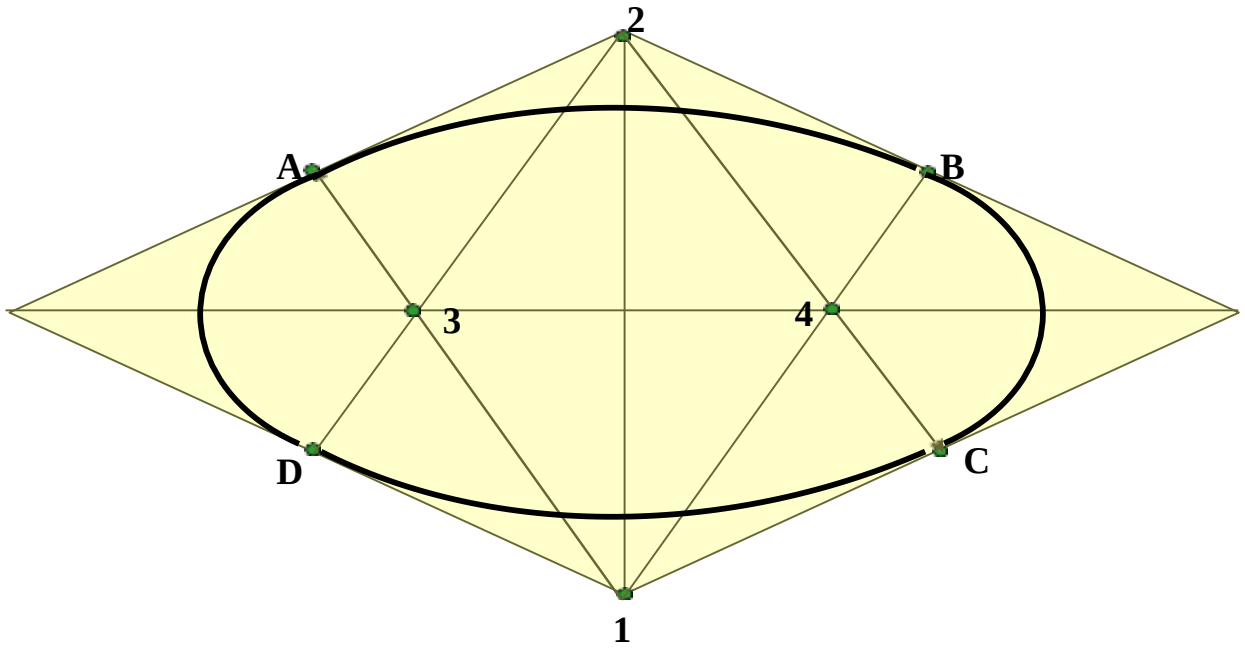


ELLIPSE

BY RHOMBUS METHOD

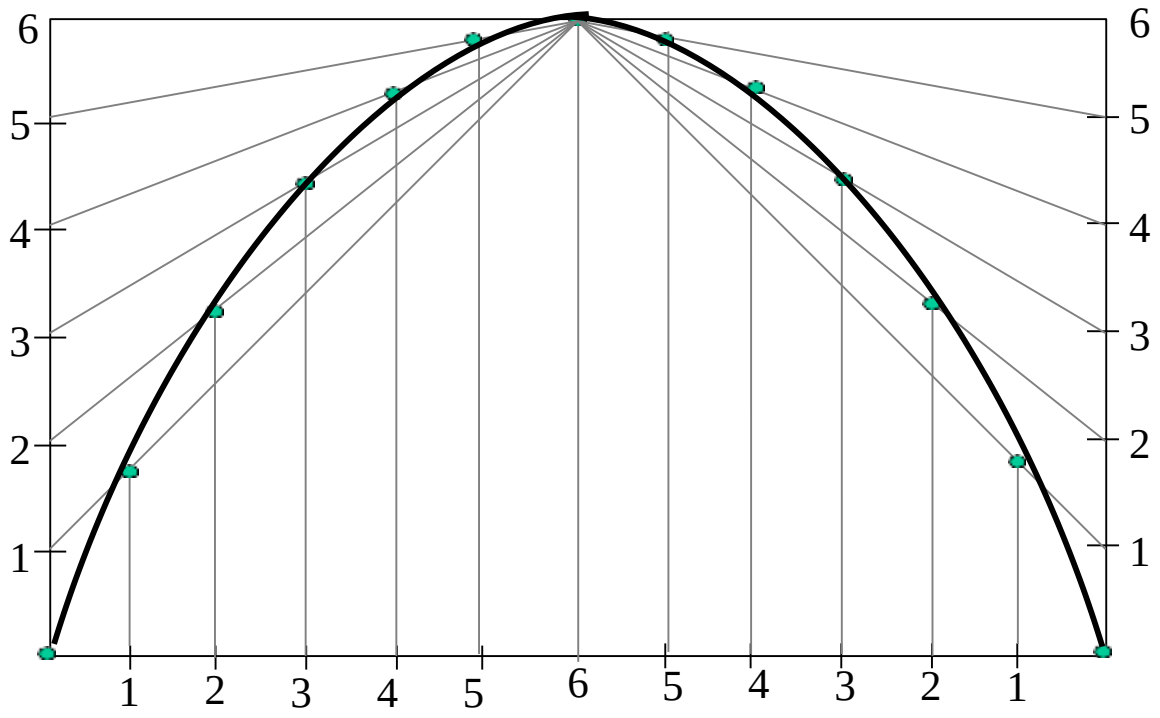
PROBLEM

DRAW RHOMBUS OF 90 MM & 60 MM LONG DIAGONALS AND INSCRIBE AN ELLIPSE IN IT.



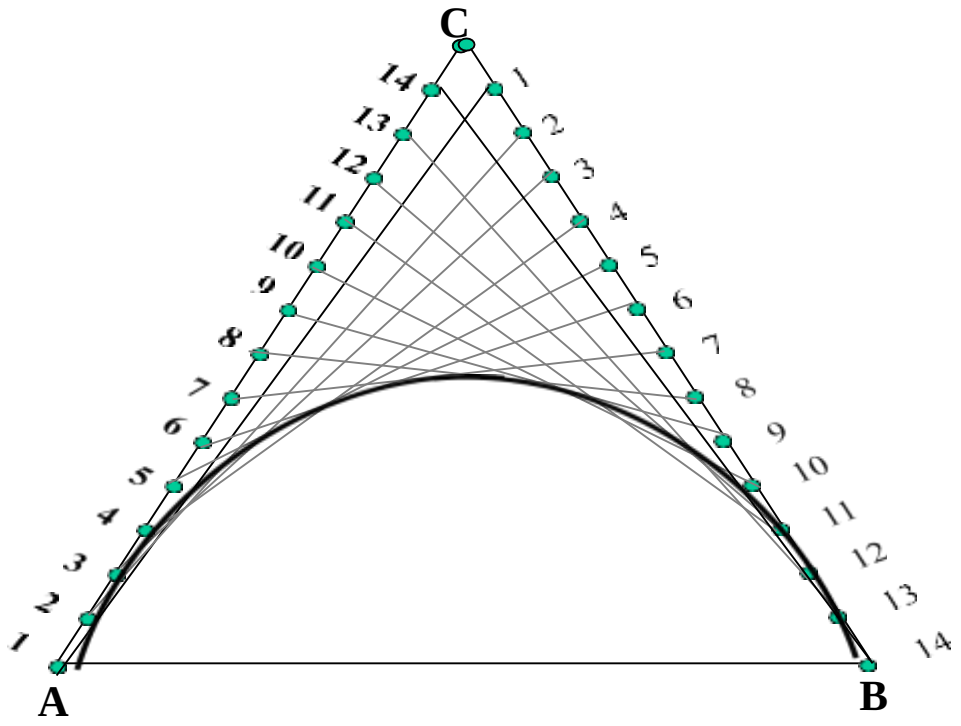
PARABOLA
RECTANGLE METHOD

PROBLEM *BALL THROWN IN AIR ATTAINS 90 M HIEGHT AND COVERS HORIZONTAL DISTANCE 140 M ON GROUND.*



PARABOLA
METHOD OF TANGENTS

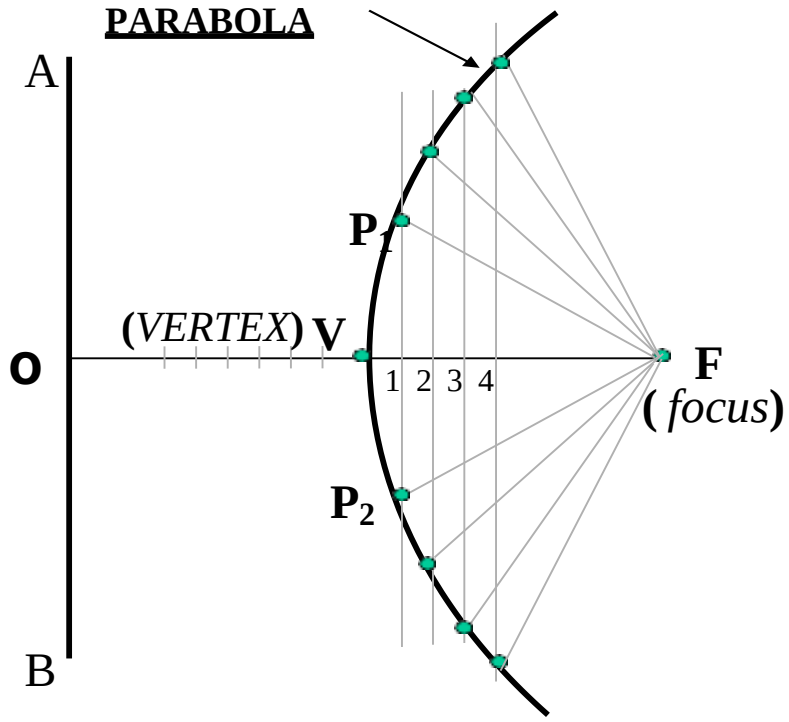
Problem *Draw an isosceles triangle of 90 mm long base and 100 mm long altitude.Inscribe a parabola in it by method of tangents.*



PARABOLA

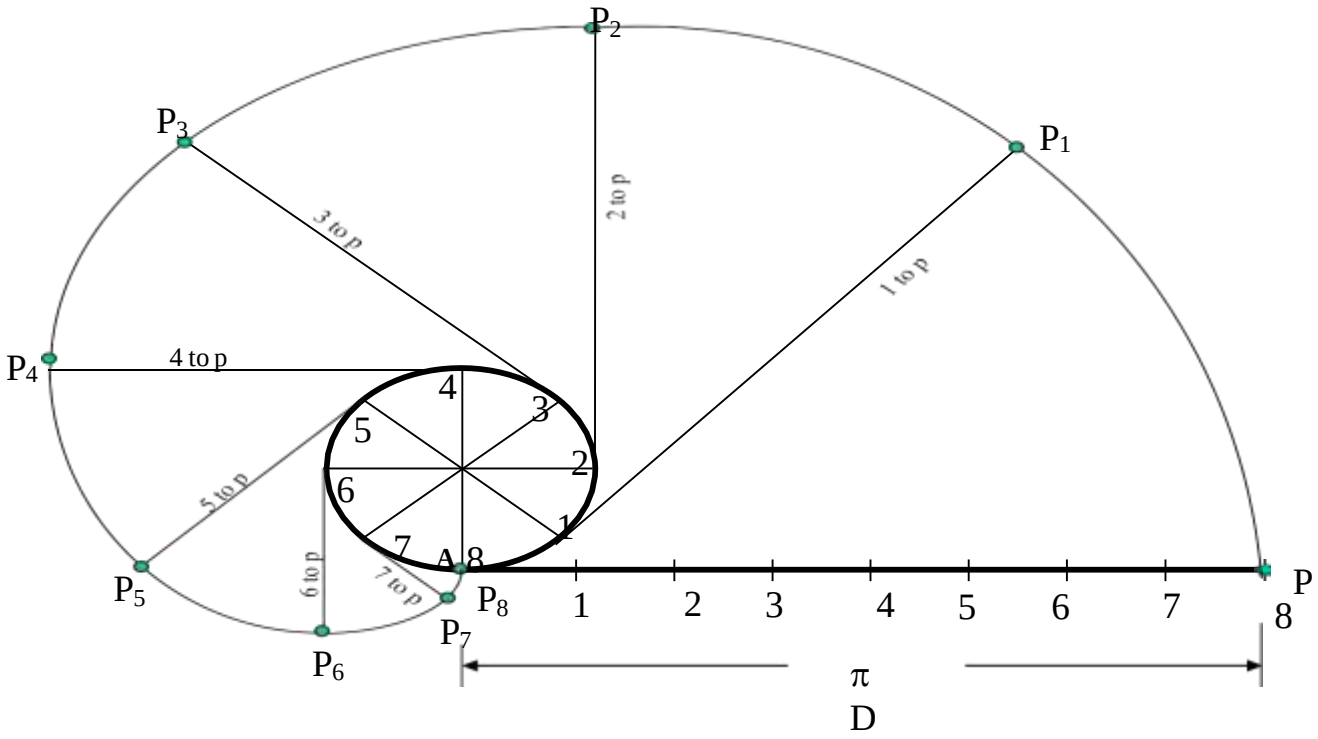
DIRECTRIX-FOCUS METHOD

PROBLEM *Point F is 50 mm from a vertical straight line AB. Draw locus of point P, moving in a plane such that it always remains equidistant from point F and line AB.*



INVOLUTE OF A CIRCLE

Problem *Draw Involute of a circle.String length is equal to the circumference of circle.*



Happiness Is A Practice ,It's Not A Destination.....

Thank You

Best Of Luck Our Future Engineers