

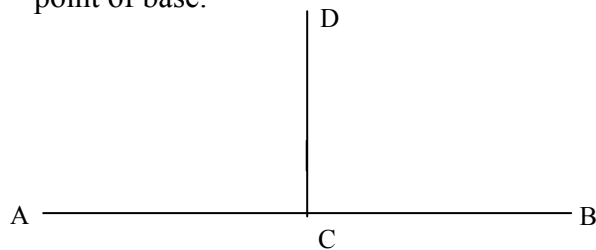
Q) Inscribe (Draw) 2 parabolas in a rectangle of 125 mm and 85 mm sides such that their axes bisect each other.

Ans) The two parabolas can be drawn by oblong (rectangle method) such that their axes meet at mid point. We need to draw 2 parabolas in different directions.

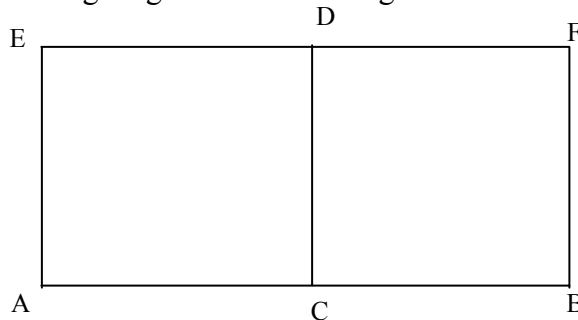
Parabola 1:

Base AB=125 mm; Axis (CD) = 85 mm

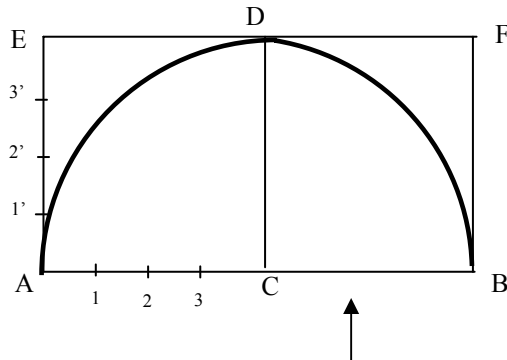
1) Draw base AB=125, & axis CD = 85 at mid point of base.



2) Construct a rectangle on ABCD by taking length as 125 and height as 85.

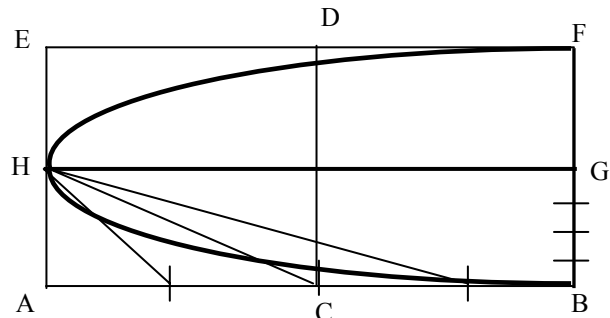


3) Divide AC & AE into same no. of equal parts & label them as 1,2,3.. & 1',2',3'...



Draw the parabola obtained in two equal parts of rectangle by symmetry.

4) For the 2nd parabola, draw an axis GH at midpoint of CD at 90° to it. Now, BF becomes the base and GH becomes the axis. Draw the parabola by oblong method.



For the 2nd parabola, divide BG & BA into same no. of equal parts and join from H, etc to get the parabola.

Above figure is shown separately for understanding. But actually both parabolas have to be drawn in the same rectangle.

5) This is the Completed parabolas.

