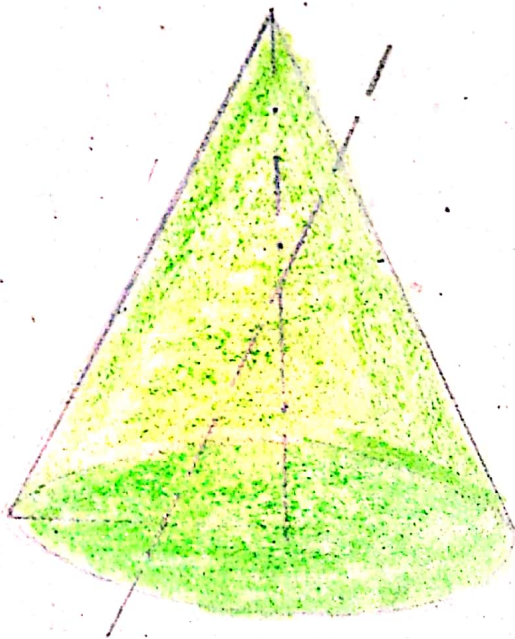
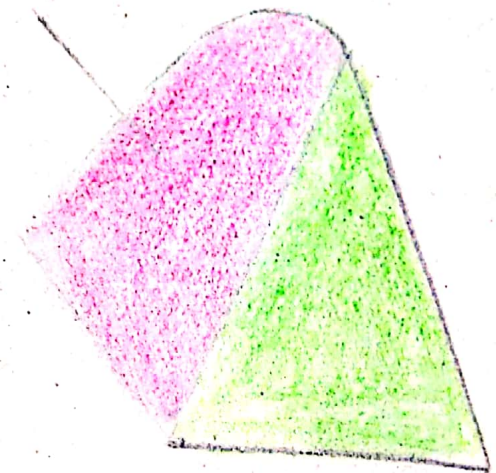


## PARABOLA

The parabola is the locus of a point, which moves in a plane so that its distances from a fixed point (focus) and a fixed straight line (directrix) are always equal.



## PARABOLA



Ratio of its distances from focus to that of directrix is constant and equal to one.

$$\text{i.e., } e = 1$$

## USES

### ELLIPSE

- Shape used in bridges & arches
- Monuments
- Path of earth around the sun
- Flanges of pipes, glands and stuffing boxes

### PARABOLA

- Motor car head lamp reflector
- Sound reflector & detector
- Bridges & arches construction
- Shape of cooling towers
- Path of particle thrown at any angle with earth.



## Method

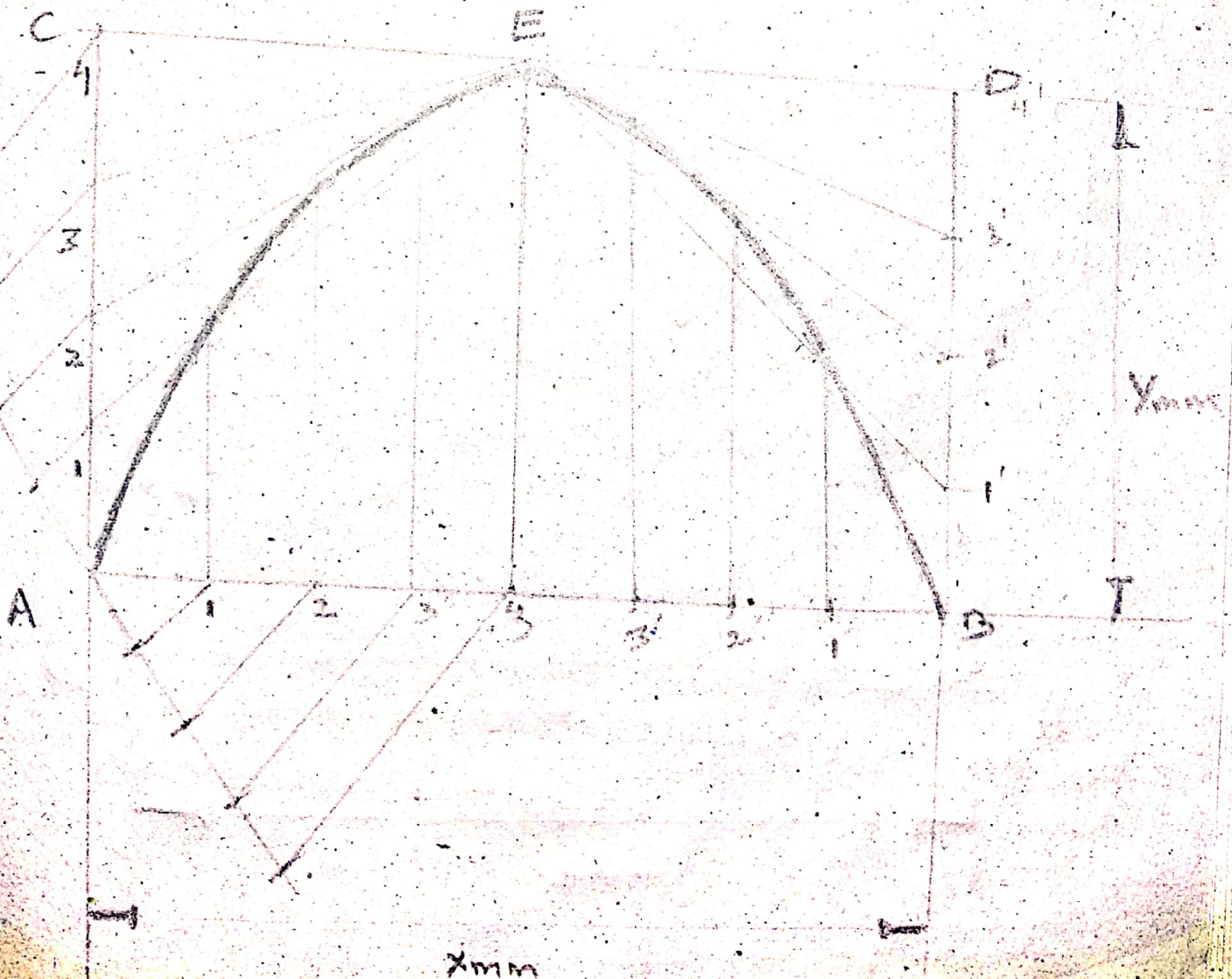
we can draw parabola by using the following method:

1) Base and Axis method  
OR  
Rectangle method

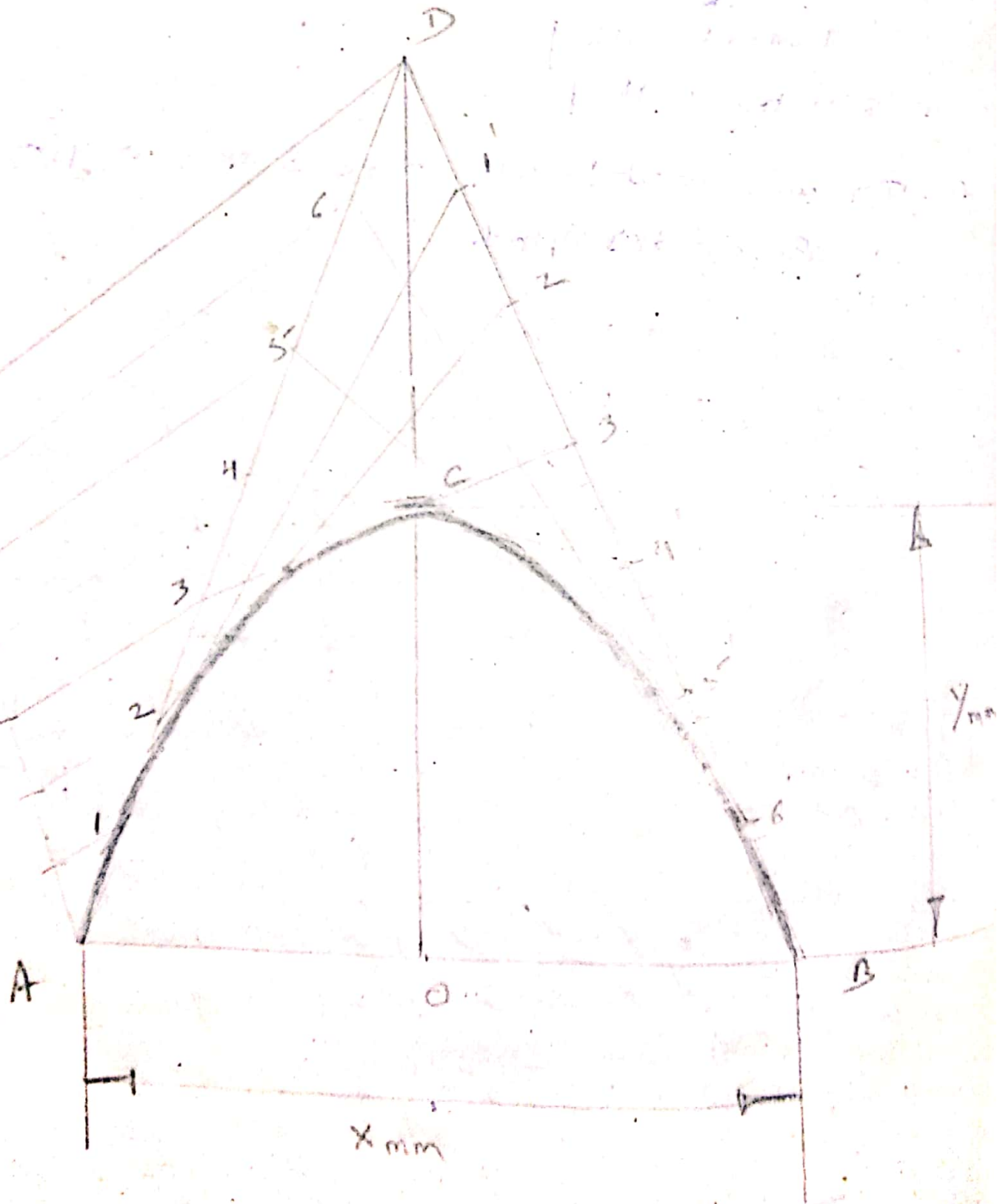
2) Double ordinate method  
OR  
Tangent method

3) Directrix method

Q. Draw a parabola when base & axis is given.  
using Base & Axis method.



Double ordinate  
or Tangent method! —





# Directorix or Eccentricity method:-

