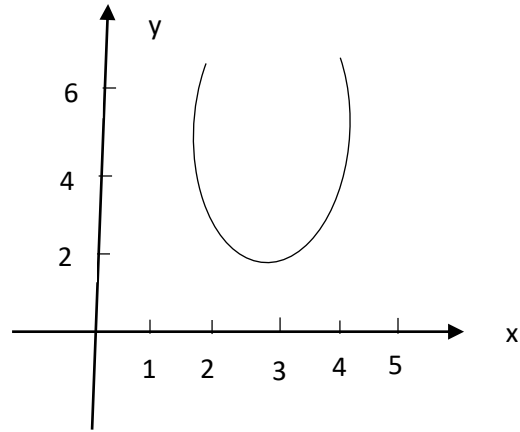


Parabola

$$y = 2 + (x-3)^2$$

x	y
3	2
1	6
2	3
4	3
5	6

⇒ Min



$$y = 2 + (x-3)^2$$

$$y = 2 + x^2 - 6x + 9$$

$$y = x^2 - 6x + 11$$

$a = 1$ $b = -6$ $c = 11$

$$\Delta = b^2 - 4ac = 36 - 4 \cdot 1 \cdot 11 < 0$$

$$a = 1 > 0$$

$$y > 0, \text{ for all } x$$