

$y' \Rightarrow$ the slope

y' the slope is Given

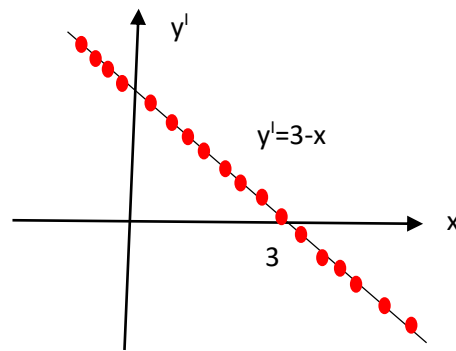
$$y' = 3 - x$$

Extreme points $y' = 0$

$$3 - x = 0$$

$$x = 3$$

For each $x = x_1$, you have another slope

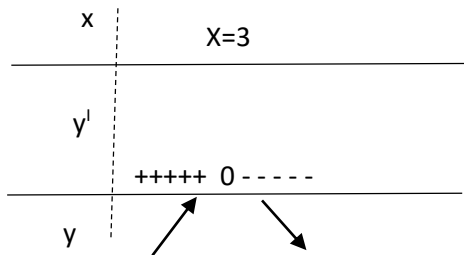


$$x < 3$$

$$y' > 0$$

when $x > 3$

$$y' < 0$$



Max $(3, y_1)$

$$y' = 3 - x, \text{ Given } y(0) = 0$$

$$y = 3x - \frac{x^2}{2}$$

$$\left(3, 4\frac{1}{2}\right) \text{ Max}$$

