Derivatives as the Concept

$$\text{slope} = \frac{\Delta y}{\Delta x}$$

P_2

Δy

P_1

Δx
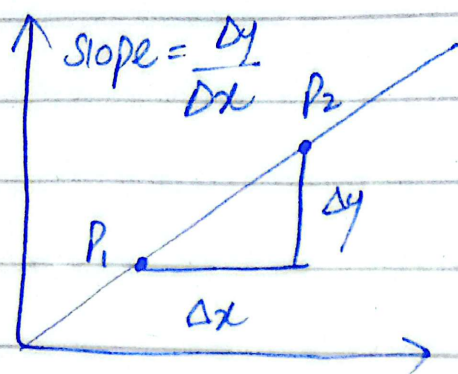
It is in the case if the slope is constant means the (change in y rightly equal to change in x).

P_4

Δy

P_3

Δx

P_2

P_1

Δy

Δx

$f'(x)$

$y = f(x)$

tangent
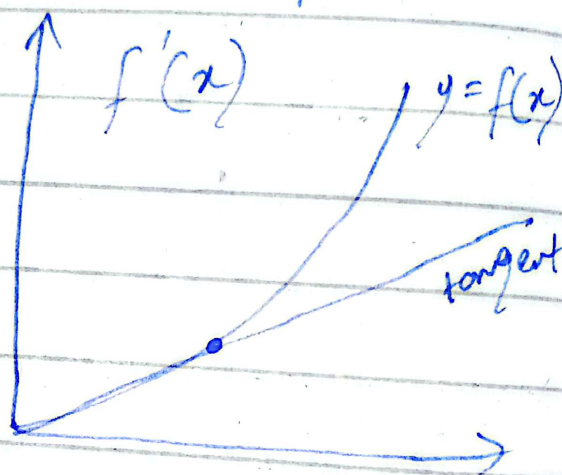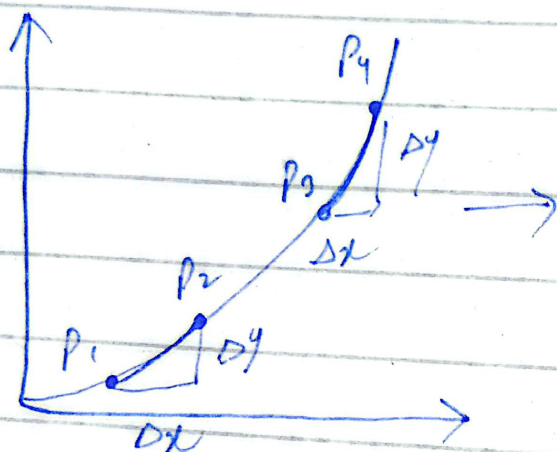
Slopes are showing different behaviours as the derivatives also gives different behaviours

Instantaneous value

slope $= \frac{dy}{dx}$

$f'(x)$

$x = y' = y^{\cdot}$