Source: [KBhMATH401SubIndex]

1 | Derivatives

=> Instantaneous rate of change at a particular point

- Average rate of change = $\frac{\Delta Y}{\Delta X}$

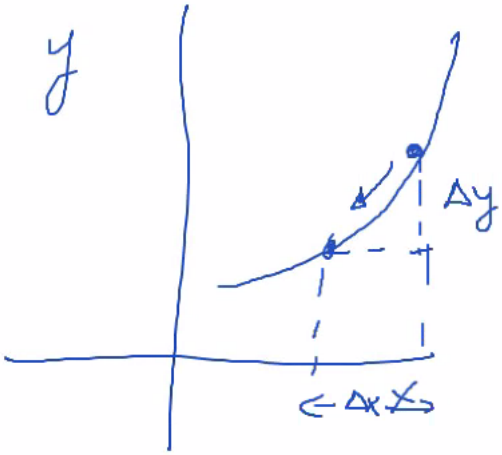

Figure 1: rateofchange.png

- Instantaneous rate of change = $\lim_{\Delta x \to 0} \frac{\Delta Y}{\Delta X}$

Derivative of $f(x)$ => $\frac{dy}{dx}$

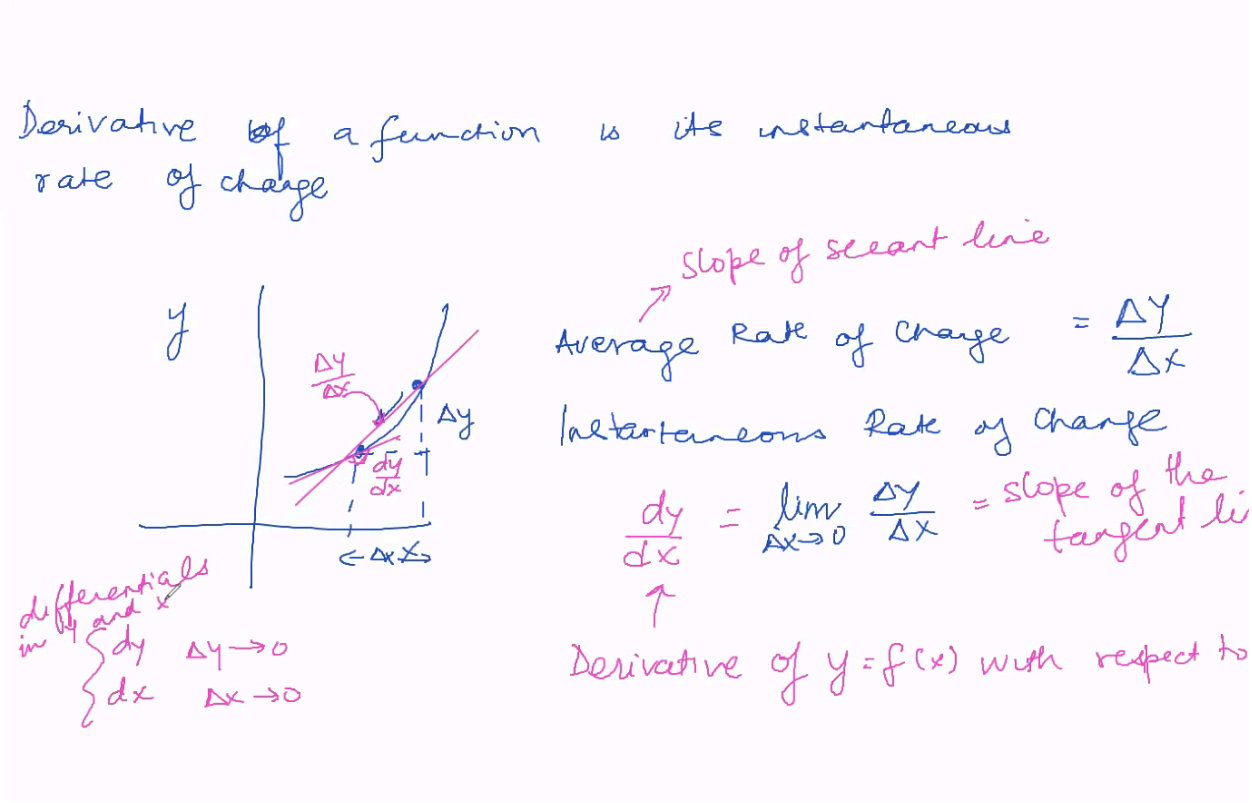

Figure 2: derivativesWB.png

1.1 | **Useful Table of Derivatives**

f(x)	f'(x)
x^2	2x