Derivatives

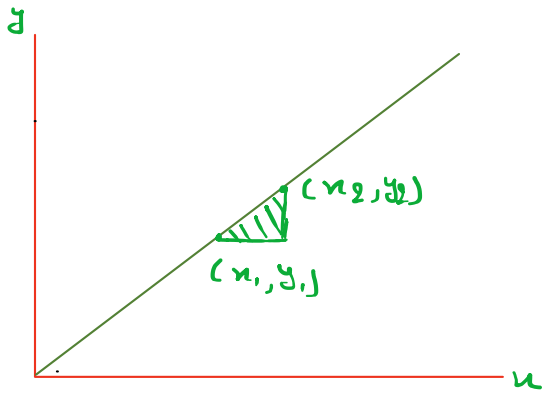
Wednesday, 23 July 2025 6:37 PM

① Straight line →

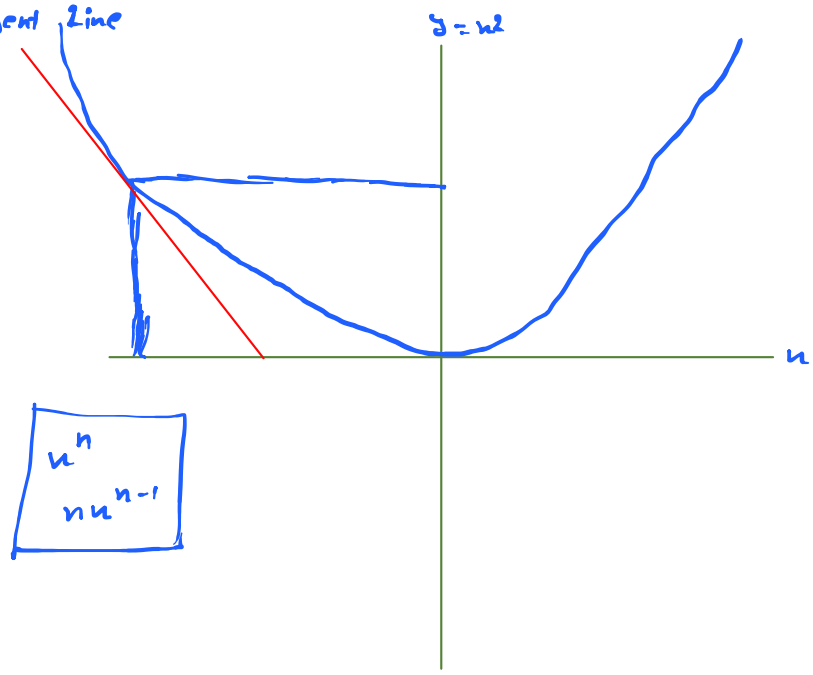
$$\text{Slope} = \frac{\text{Changes in } y}{\text{Changes in } x}$$

$$s = \frac{y_2 - y_1}{x_2 - x_1}$$

$$\boxed{s = \frac{\Delta y}{\Delta x}}$$



② - For Curve line →



$$\boxed{\text{Derivative} = \frac{dy}{dx}}$$

Ex → $y = x^2$

$$\Delta = \frac{d}{dx} x^2$$

$$= 2x$$

$$\boxed{\begin{array}{l} x^n \\ n x^{n-1} \end{array}}$$