

Derivative of Fields.

how do we take the derivative of a field that depends on more than one variable.

$$\rightarrow \frac{df}{dx} \hat{x} + \frac{df}{dy} \hat{y} + \frac{df}{dz} \hat{z}$$

- Gradient Operator ∇

$$\nabla f = \left(\frac{d}{dx} \hat{x} + \frac{d}{dy} \hat{y} + \frac{d}{dz} \hat{z} \right) f = \vec{G}$$