

Taylor series near x :

$$\sum_{n=0} \frac{dy^n}{dx}(x) \cdot \frac{x^n}{n!}$$

Fundamental equation:

$$T(x) = \frac{x}{y} \cdot \frac{dy}{dx} \tag{1}$$

$$T(x) = \frac{d \ln(y)}{d \ln(x)} \rightarrow \frac{d}{dx} \ln(y) = \frac{1}{y} \frac{dy}{dx} \tag{2}$$

$$T(x) = x \cdot \frac{d}{dx} \ln(y) \tag{3}$$