PS due Fridays

Tutorials: Thursdays 10AM & 5PM

office hours Tuesdays 4:PM

$$\frac{f(x+dx)-f(x)}{dx} \qquad f(x+dx) = f(x) + dx\, f'(x) + \frac{dx^2}{2} f'' + \ldots + \frac{d^n}{n!} f$$

$$f(x) = f(x) + g_0 \varepsilon$$

$$dx f'(x) \quad + \frac{dx^2}{2} f''_x \ldots - + g_+ f - g \varepsilon f$$

$$f' = \quad () \quad + \frac{dx}{2} f'' + \frac{g \varepsilon f}{dx}$$

$$\frac{\partial Error}{\partial dx} = \frac{f''}{2} - \frac{g\varepsilon}{dx^2} = 0 \qquad dx^3 = \frac{g \varepsilon f}{f''} \qquad dx \sim \sqrt{\frac{\varepsilon f}{f''}}$$