

Lecture 13: Linearization

- 1 Find the linearization $L(x)$ of the function $f(x) = x^{1/6}$ at $x = 1'000'000$.
- 2 Estimate $1000100^{1/6}$!
- 3 Find the linearization of $f(x, y) = \sin(xy^2)$ at $(\pi, 1)$.
- 4 Estimate $\sin((\pi + 1/10), 1.01^2)$.