Contents

0.1 Maclaurin series

A Taylor series around c = 0.

$$f(x) = \sum_{i=0}^{\infty} (x - c)^{i} \frac{f^{i}(c)}{i!}$$

$$f(x) = \sum_{i=0}^{\infty} (x)^{i} \frac{f^{i}(0)}{i!}$$

For example, for:

$$f(x) = (1 - x)^{-1}$$

$$f^i(0) = i!$$

So, around x = 0:

$$f(x) = \sum_{i=0}^{\infty} (x)^{i}$$