

Set theory - Functions

Definitions of Taylor Series and Maclaurin Series

graph 78.png

Theorem 5

If f has a power series representation (expansion) at a , that is, if

$$f(x) = \sum_{n=0}^{\infty} c_n(x - a)^n \quad |x - a| < R$$

then its coefficients are given by the formula

$$c_n = \frac{f^{(n)}(a)}{n!}$$