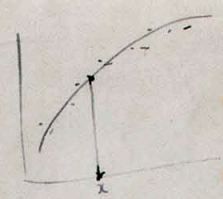


表計算
 統計 (保険, 統計)
 算の計算
 分析 (analysis)
 基本的
 計算



functional form の式
 const. a, b, ... の値 (π)
 x, y, ... の値
 table を用いた function の値の計算

序説 — Practical analysis
 relative error
 § 1. error

$F(x, y, \dots, a, b, \dots)$
 $F \rightarrow f(x, y, \dots, a, b, \dots)$

Chapter I. Interpolation

§ 2. Calculus of finite differences.

Difference equation

§ 3. Interpolation formulas. Newton, Bessel (modified form), Stirling.

§ 4. Interpolation of arbitrary functions

general theorem.
example 1, 2.

§ 5. Interpolation in practice.
General theory.

difference quotient & differential quotient

$$\frac{\Delta^{(n+1)} p(x)}{\Delta x^{n+1}} \approx p^{(n+1)}(x) \approx \frac{1}{(n+1)!} \Delta x^n$$

Δx の ~~値~~ 十分小さい場合

~~§ 5. Remarks.~~

Remainder Newton

$$R(u) = \frac{1}{(n+1)!} \Delta^{(n+1)} p(u)$$

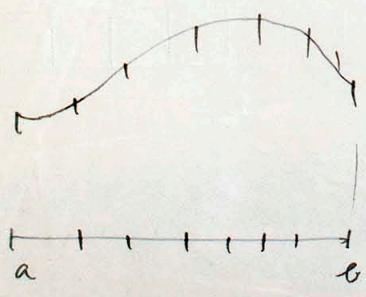
$0 < u < n$ の間におく
 $0 < w < n$

Steffensen Interpolation

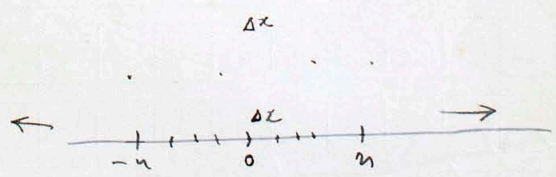
人々 interpolate!

§ 6. Other ~~interpolations~~ interpolations.

II.



problem of convergence



Jackson, Approximating function. Colloquium (Ann. Math. Soc.)