

Maths for Algorithms

Maths from Maths for Computer Science MIT 6.042

L3.2.1 Asymptotic Notation

Asymptotic Equivalence - Ref: 1

Def: $f(n) \sim g(n)$ the \sim read as asymptotical equal / equivalent

$$\lim_{n \rightarrow \infty} \frac{f(n)}{g(n)} = 1 \quad (1)$$

Summation Eqn.2

$$\sum_{x=1}^n x^2 = 1 \quad (2)$$

Product Sequence Eqn.3

$$\prod_{x=1}^n x^2 = 1 \quad (3)$$