

常用數學符號的中文解釋

A: For any, (對於任意的)

E: There exists (存在)

E! : There exists a unique... (存在唯一的...)

極限的定義: $\lim_{x \rightarrow c} f(x) = L$

$\forall \epsilon > 0, \exists \delta > 0$, such that " $0 < |x - c| < \delta$ implies $|f(x) - L| < \epsilon$ " (Given $\epsilon > 0$) (we can find $\delta > 0$)

給定任意 $\epsilon > 0$, 存在有 $\delta > 0$, 使得

"當 $0 < |x - c| < \delta$ 時, $|f(x) - L| < \epsilon$ 成立"

iff: if and only if; 若且唯若, "iff" \iff

Example:

$0 < |x - c| < \delta$ iff $x \in (c - \delta, c) \cup (c, c + \delta)$ (聯集 (union))

$[x] = n$ iff $n \in \mathbb{Z}$ and $n \leq x < n + 1$ (integers (整數))