

Info

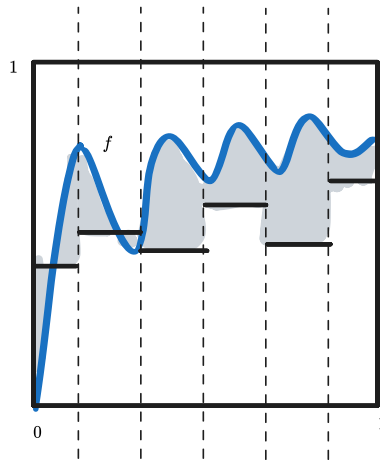
This note [found here](#)
as a part of [a collection](#)
is written (completely with human hands) by [Rupadarshi Ray](#),
created on May 25, 2026 5:06:36 PM,
and was last modified on May 26, 2026 4:19:31 PM.

(ϵ, n) -measurable function

A measurable function

$$f : [0, 1] \rightarrow [0, 1]$$

is (ϵ, n) -measurable if there exists a function g on $[0, 1]$ which is constant on the dyadic intervals $2^{-n}[i, i + i]$



and differs from f in L^1 -norm by at most ϵ

$$\|f - g\|_1 \leq \epsilon$$

Current note has 0 direct children and 0 total descendants.

- [stamp](#) stamp
 - [Rf](#) subobjects of and functions on $\mathbb{R}^n, T^n, S^n, \mathbb{C}^n$
 - [Lmeas](#) Lebesgue measurable subsets of and functions on \mathbb{R}^n, T^n, S^n
 - [f quant](#) (ϵ, n) -measurable function

And it has 15 siblings.

- [stamp](#) stamp
 - [Rf](#) subobjects of and functions on $\mathbb{R}^n, T^n, S^n, \mathbb{C}^n$
 - [Lmeas](#) Lebesgue measurable subsets of and functions on \mathbb{R}^n, T^n, S^n
 - [BMO](#) Functions with uniformly bounded mean oscillations on cubes
 - [decom bd](#) Chebyshev's inequality
 - [decom CZ](#) Calderon-Zygmund decomposition
 - [density](#) Lebesgue density of measurable sets
 - [DMO](#) Functions with uniformly bounded mean oscillations on dyadic cubes
 - [End int](#) Volterra operator $\int_{[0,-]}^1 : L_{\text{loc}}^1[0, 1] \rightarrow \mathcal{C}[0, 1]$
 - [f](#) Measurable functions on \mathbb{R}^n
 - [f quant](#) (ϵ, n) -measurable function
 - [int](#) Integrability and integral of measurable functions on \mathbb{R}^n
 - [int HL](#) Hardy-Littlewood maximal functions of $L_{\text{loc}}^1(\mathbb{R}^n)$
 - [int mean](#) Lebesgue averaging and differentiation
 - [int monotone](#) Integrals of a monotonically converging sequence of functions
 - [int undergraph](#) Lebesgue integral from measure of undergraph
 - [Lorentz](#) $L^{p,q}$
 - [unit mass](#) $E([0, 1]) = E(0, 1), E([- \pi, \pi]) = E(S^1)$