Why

We define a probability density which is a constant function over some interval of real numbers.

What

A *uniform density* on the inveral $[a, b]$ is the density which has constant value $b - a$.

Uniform Densities

Probability Densities

Real Integrals

Nonnegative Integrals

Simple Integrals

Measurable Functions

Measure

Extended Real Numbers

Sigma Algebras

Real Limits

Absolute Value

Simple Functions

Real Functions

Interval Length

Probability Distributions

Intervals

Real Line

Real Order

Real Sequences

Real Summation

Real Numbers

Integral Line

Rational Numbers

Integer Arithmetic

Sequences

Set Numbers

Direct Products

Natural Multiplicative Identity

Natural Additive Identity

Finite Sets

Identity Elements

Arithmetic

Natural Summation

Equivalent Sets

Natural Powers

Integer Products

Family Operations

Function Inverses

Family Unions and Intersections

Integer Sums

Natural Products

Algebras

Set Operations

Function Composites

Function Images

Families

Operations

Integer Numbers

Natural Sums

Functions

Equivalence Relations

Natural Order

Recursion Theorem

Relations

Peano Axioms

Cardinality

Cartesian Products

Subset Systems

Characteristic Functions

Uncertain Outcomes

Natural Induction

Ordered Pairs

Generalized Set Dualities

Set Powers

Natural Numbers

Partitions

Intersection of Empty Sets

Set Dualities

Unordered Triples

Successor Sets

Set Unions and Intersections

Set Symmetric Differences

Set Intersections

Pair Unions

Set Complements

Set Union

Pair Intersection

Set Difference

Unordered Pair

Empty Set

Set Specification

Geometry

Set Inclusion

Standardized Accounts

Accounts

Deductions

Quantified Statements

Logical Statements

Sets

Identities

Statements

Names

Letters

Objects