Why

[1]

Definition

Given a probability space $(\Omega, \mathcal{F}, \mathbf{P})$, a sequence of $\mathcal{G}_1, \ldots, \mathcal{G}_n$ of sub-σ-algebras of $\mathcal{F}$, are *independent* if

$$\mathbf{P}(A_1 \cap A_2 \cap \cdots A_n) = \prod_{i=1}^{n} \mathbf{P}(A_i)$$

for any $A_1 \in \mathcal{G}_1$, $A_2 \in \mathcal{G}_2$, ..., $A_n \in \mathcal{G}_n$. A family $\{\mathcal{G}_i\}_{i \in I}$ is a family of sub-σ-algebras of $\mathcal{F}$ is *independent* if any finitely many of them are independent.

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[1]Future editions will include this.

Independent Sigma Algebras

Probability Measures

Dependent Events

Measures

Conditional Event Probabilities

Sigma Algebras

Event Probabilities

Real Series

Extended Real Numbers

Real Limits

Absolute Value

Interval Length

Probability Distributions

Intervals

Real Line

Real Sequences

Real Order

Real Summation

Sequence

Real Numbers

Rational Order

Integral Line

Rational Numbers

Subset Algebras

Lists

Integer Arithmetic

Natural Summation

Cardinality

Set Numbers

Natural Multiplicative Identity

Natural Additive Identity

Direct Products

Finite Sets

Identity Elements

Arithmetic

Family Operations

Natural Powers

Integer Products

Equivalent Sets

Operations

Function Inverses

Family Unions and Intersections

Comparisons

Integer Order

Integer Sums

Natural Products

Function Images

Function Composites

Families

Orders

Integer Numbers

Natural Sums

Functions

Converse Relations

Equivalence Relations

Natural Order

Recursion Theorem

Relations

Peano Axioms

Subset Systems

Set Products

Natural Induction

Uncertain Outcomes

Ordered Pairs

Set Powers

Generalized Set Dualities

Natural Numbers

Set Unions and Intersections

Partitions

Unordered Triples

Intersection of Empty Set

Successor Sets

Set Dualities

Set Symmetric Differences

Set Intersections

Pair Unions

Set Complements

Pair Intersections

Set Unions

Set Differences

Unordered Pairs

Empty Set

Geometry

Set Specification

Set Equality

Set Inclusion

Standardized Accounts

Accounts

Deductions

Quantified Statements

Logical Statements

Statements

Sets

Identities

Names

Letters

Objects