Why

todo

Definition

Two events are *independent* if the probability of their intersection is the product of their respective probabilities.

Definition

Let $\mathbf{P}$ be an event probability function with set of outcomes A. Then the events B and C are independent if

$$\mathbf{P}(B \cap C) = \mathbf{P}(B)\mathbf{P}(C).$$

Event Independence

Conditional Event Probability

Event Probabilities

Probability Distributions

Intervals

Real Summation

Real Numbers

Natural Summation

Probability Events

Rational Numbers

Family Operations

Natural Sums

Probability Outcomes

Set Operations

Integer Numbers

Families

Algebras

Cardinality

Probability

Zero

Power Set

Operations

Injective Functions

Common Sense

Equation Solutions

Functions

Natural Numbers

Set Symmetric Differences

Relations

Set Intersections

Set Unions

Equations

Ordered Pairs

Set Complements

Unordered Pairs

Empty Set

Set Specification

Set Inclusion

Set Equality

Sentences

Identity

Sets

Objects