### Why

todo

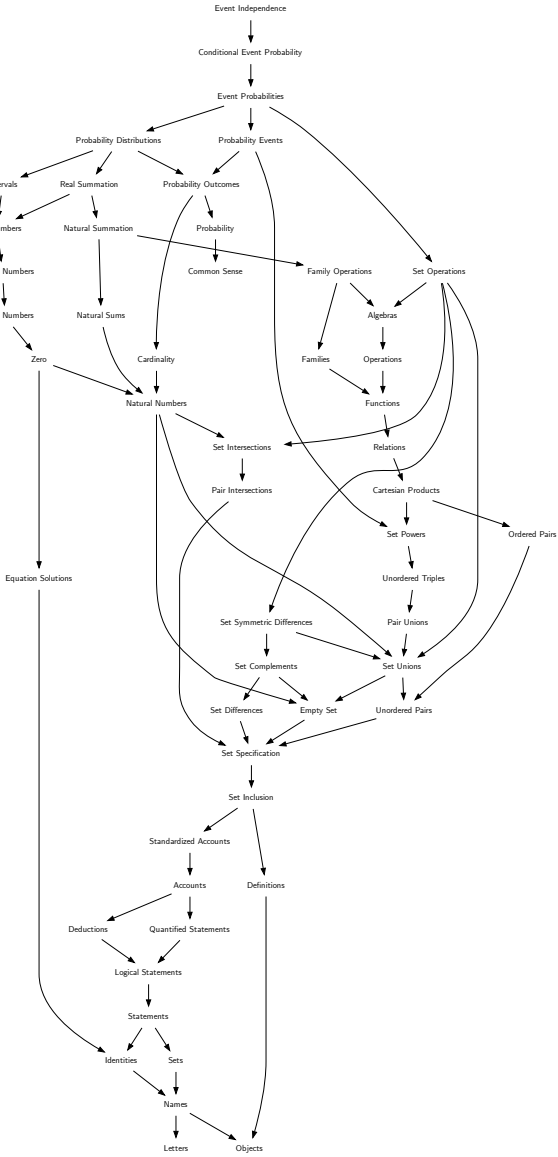
### Definition

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
Probability Events
Intervals
Real Summation
Probability Outcomes
Real Numbers
Natural Summation
Probability
Rational Numbers
Common Sense
Family Operations
Set Operations
Integer Numbers
Natural Sums
Algebras
Zero
Cardinality
Families
Operations
Natural Numbers
Functions
Set Intersections
Relations
Pair Intersections
Cartesian Products
Ordered Pairs
Set Powers
Equation Solutions
Unordered Triples
Set Symmetric Differences
Pair Unions
Set Complements
Set Unions
Set Differences
Empty Set
Unordered Pairs
Set Specification
Set Inclusion
Standardized Accounts
Accounts
Definitions
Deductions
Quantified Statements
Logical Statements
Statements
Identities
Sets
Names
Letters
Objects