Why

[1]

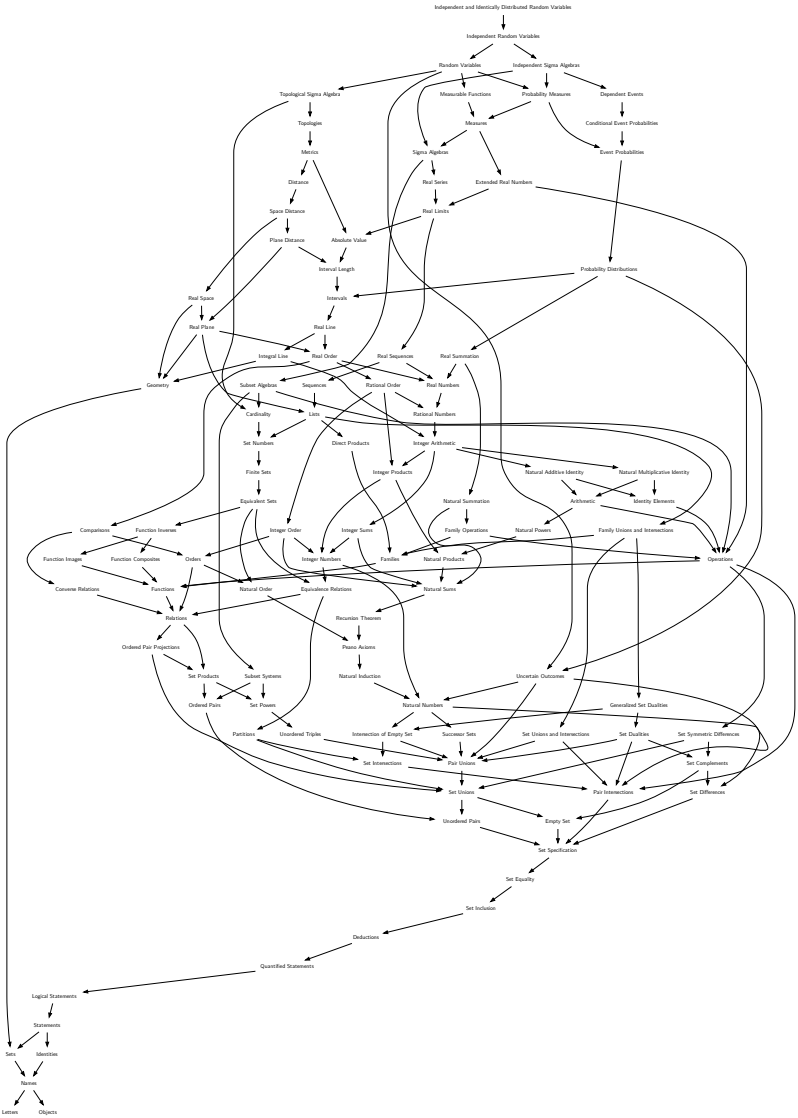
Definition

Two random variables are *independent and identically distributed* if they are independent and have the same law. A sequence of random variables is *independent and identically distributed* if the random variables are independent and each random variable has the same law.

Notation

We abbreviate independent and identically distributed by *i.i.d.* or *iid* or *IID*. Each of these is read aloud as "i i d".

[1] Future editions will include. It is a simplifiying assumption.


Independent and Identically Distributed Random Variables
Independent Random Variables
Random Variables
Independent Sigma Algebras
Topological Sigma Algebra
Measurable Functions
Probability Measures
Dependent Events
Topologies
Measure
Conditional Event Probabilities
Metrics
Sigma Algebras
Event Probabilities
Distance
Real Series
Extended Real Numbers
Space Distance
Real Limits
Plane Distance
Absolute Value
Probability Distributions
Interval Length
Intervals
Real Space
Real Line
Real Plane
Integral Line
Real Order
Real Sequences
Real Summation
Geometry
Subset Algebra
Sequences
Rational Order
Real Numbers
Cardinality
Lists
Rational Numbers
Set Numbers
Direct Products
Integer Arithmetic
Finite Sets
Integer Products
Natural Additive Identity
Natural Multiplicative Identity
Arithmetic
Identity Elements
Equivalent Sets
Natural Summation
Comparisons
Function Inverses
Integer Order
Integer Sums
Family Operations
Natural Powers
Family Unions and Intersections
Function Images
Function Composites
Orders
Integer Numbers
Families
Natural Products
Operations
Converse Relations
Functions
Natural Order
Equivalence Relations
Natural Sums
Relations
Recursion Theorem
Ordered Pair Projections
Peano Axioms
Set Products
Subset Systems
Natural Induction
Uncertain Outcomes
Ordered Pairs
Set Powers
Natural Numbers
Generalized Set Dualities
Partitions
Unordered Triples
Intersection of Empty Set
Successor Sets
Set Unions and Intersections
Set Dualities
Set Symmetric Differences
Pair Unions
Set Intersections
Set Complements
Pair Intersections
Set Unions
Set Differences
Unordered Pairs
Empty Set
Set Specification
Set Equality
Set Inclusion
Deductions
Quantified Statements
Logical Statements
Statements
Sets
Identities
Names
Letters
Objects