

Glossary

bar graph A graphical display consisting of numerous, separate bars. Used to represent the distribution of a discrete random variable.

Bernoulli distribution The distribution of a random variable that can take on only two possible values: 0 or 1.

binomial distribution The distribution of the number of 'successes' in n independent trials, each of which is a 'success' with probability π or a 'failure' with probability $1 - \pi$.

continuous random variable A random variable that can take on any of a continuous set of values.

discrete random variable A random variable that can only take on certain separate values.

distribution of a random variable The probabilities of the random variable taking on its different possible values.

histogram A bar chart in which the outcomes are divided into groups, representing the number of occurrences of each group.

independence of events A and B A situation in which the probability of events A is the same regardless of whether event B happens.

joint probability of events A and B The probability of both of the events A and B happening.

Law of Large Numbers States that as more trials occur, the relative proportion of occurrences of an event converges to the probability of that event.

normal distribution A distribution described by the Normal curve.

parameter A constant value that determines the shape of a random variable.

Poisson distribution A distribution used to approximate random variables that are counting occurrences of some event.

probability of an event The relative frequency of the occurrence of that event in an infinite number of trials.

random variable A value assigned to each possible outcome of a random trial.

relative frequency of an event The number of times the event occurs in a set number of trials.

standard normal distribution A normal distribution in which the mean is 0 and the standard deviation is 1.

support of a random variable The set of all possible values that a random variable can take on.