How can I calculate the probability of an event occurring in Google Sheets?

Authored by

stats writer

June 30, 2024

The process of determining the chance of an event happening in Google Sheets can be calculated by using the appropriate statistical formulas and functions available in the program. These include the use of probability distributions, such as the binomial or normal distribution, and the application of mathematical equations such as the probability mass function. By carefully analyzing the data and applying the necessary calculations, the probability of an event occurring in Google Sheets can be accurately determined. This method allows users to make informed decisions and predictions based on the likelihood of an event happening in their Google Sheets.

PROB

Given a set of values and corresponding probabilities, calculates the probability that a value chosen at random falls between two limits.

Sample Usage

`PROB({1,2,3,4},{0.25,0.25,0.25,0.25},3)`

`PROB(A2:A100,B2:B100,C2,C3)`

Syntax

`PROB(data, probabilities, low_limit, )`

`data` - Array or range containing the dataset to consider.

`probabilities` - Array or range containing probabilities corresponding to `data`.

Each value in `probabilities` must be greater than `0` and less than or equal to `1`.

`low_limit` - The lower bound on the value range for which to calculate the probability.

`high_limit` - - The upper bound on the value range for which to calculate the probability.

If `high_limit` is omitted, `PROB` calculates the probability that a value chosen at random is exactly equal to `low_limit`.

Notes

The number of values in `data` and `probabilities` must be the same.

See Also

`CRITBINOM`: Calculates the smallest value for which the cumulative binomial distribution is greater than or equal to a specified criteria.

`BINOMDIST`: Calculates the probability of drawing a certain number of successes (or a maximum number of successes) in a certain number of tries given a population of a certain size containing a certain number of successes, with replacement of draws.

Examples