

Re: Does a "pure" real valued probability make any sen

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From: Sam Wormley (swormley1_at_mchsi.com)

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SkanderH wrote:

- > According to most text books the definition of the probability of an
- > outcome is that if you could (ideally) perform an experiment to test
- > this outcome a (infinite) large number of times then the probability
- > of the outcome is the ratio of the number of successful outcomes to
- > the total number of experiments.

Ref: <http://mathworld.wolfram.com/Probability.html>

Probability is the branch of mathematics that studies the possible outcomes of given events together with the outcomes' relative likelihoods and distributions. In common usage, the word "probability" is used to mean the chance that a particular event (or set of events) will occur expressed on a linear scale from 0 (impossibility) to 1 (certainty), also expressed as a percentage between 0 and 100%. The analysis of events governed by probability is called statistics.

There are several competing interpretations of the actual "meaning" of probabilities. Frequentists view probability simply as a measure of the frequency of outcomes (the more conventional interpretation), while Bayesians treat probability more subjectively as a statistical procedure that endeavors to estimate parameters of an underlying distribution based on the observed distribution.

A properly normalized function that assigns a probability "density" to each possible outcome within some interval is called a probability function (or probability distribution function), and its cumulative value (integral for a continuous distribution or sum for a discrete distribution) is called a distribution function (or cumulative distribution function).

See: <http://mathworld.wolfram.com/Probability.html>