

Probability



Empirical / simulation-based probability:

Based on long-term relative frequency – after running a lot of trials, in what percentage of the trials the event occurred.

Theoretical / formal probability:

Based on idealized mathematical formulas.

Two different ideas of how probability works:

Law of Averages:

If one event doesn't happen for a while, it's more likely to happen next time.

FALSE!

Law of Large Numbers:

In the long run, the fraction of occurrences of an event gets closer and closer to its true probability.

TRUE!