

History of Probability

Probability is a type of statistics. It is used to tell the likelihood of a hypothesis or to tell the behavior of stochastic process, like throwing dice or coins. There is evidence of probability from ancient and medieval times, it was often referred to as chance or odds. In ancient times people would draw a circle on the floor and toss a Talus bone (like playing marbles), the game resembled the modern game "Snakes and Ladders." There was not a calculation to find probability until 1664.

In 1664, Pierre de Fermat and Blaise Pascal had a gambler's dispute and lead them to develop a calculation for probability after playing a game of chance. The game of chance they were playing consisted of throwing a pair of dice 24 times, the goal was to have an occurrence of at least one "double six" during the 24 throws.

- 1.) What is the probability of landing on a double six during 24 throws?

People began to have an understanding of probability by using dice; they began by hypothesizing the lowest number and seeing if that was true then forming the probability to get the lowest number. The mathematician, Dante, hypothesized when throwing three dice the lowest number you can get is three.

- 2.) What is the probability of getting the sum of three when using three dice?

In 1630, Galileo concluded there are certain numbers that have a higher probability because there are more ways to create those numbers.

- 3.) Suppose you have two dice, which sum of number(s) has/have the highest probability of showing when you roll them?

In 1718, Jacob Bernoulli concluded when you toss a fair coin 1000 times it is likely it will land on heads 500 times. The more times you toss the coin the closer it is to a half and half proportion.

- 4.) Flip a coin 5 times, how times do you land on heads?

5.) Flip a coin 20 times, how times do you land on heads?

6.) Flip a coin 50 times, how times do you lands on heads?

7.) What was your probability of landing on heads?

8.) How is probability used in the real-world?