

07-11-2025

Probability: It measures likelihood of a event.

- Ex Dice={1,2,3,4,5,6}
- $P(x) = \frac{\text{No of favourable outcomes}}{\text{Total No of outcomes}}$

2 Rules in probability

1.Addition rule: OR

2.Multiplication Rule: AND

Addition Rule

1.Mutual Exclusive Event

2.Non-Mutual Exclusive Event

1.Mutual Exclusive Event

The different events won't occur at the same time.

Some examples of mutually exclusive events are

- Tossing a coin we either get a head or a tail. Head and tail cannot appear simultaneously. Therefore, the occurrence of a head or a tail is two mutually exclusive events.

2. Non-Mutual Exclusive Event

Here Multiple event can occur at the same time.

Some examples of non-mutually exclusive events include:

- Getting a red card and getting a king.
- Getting an odd number and multiple of 3 in a dice throw.