

Probability Event and Explanation with Example:

Events	Explanation	Example
Equally likely events	Two or more events are said to be equally likely if each one of them has an equal chance of occurring.	Head and tail are equally likely events in tossing a coin.
Certain events	In an experiment, the event which surely occur is called certain event.	When we roll a die, the event of getting any natural number from one to six is a certain event.
Impossible events	In an experiment if an event has no scope to occur then it is called an impossible event.	When we toss two coins, the event of getting three heads is an impossible event.
Mutually exclusive events	Two or more events are said to be mutually exclusive if they don't have common sample points. i.e., events A , B are said to be mutually exclusive if $A \cap B = \emptyset$	When we roll a die the events of getting odd numbers and even numbers are mutually exclusive events.
Exhaustive events	The collection of events whose union is the whole sample space are called exhaustive events.	When we toss a coin twice, the collection of events of getting two heads, exactly one head, no head are exhaustive events.
Complementary events	The complement of an event A is the event representing collection of sample points not in A . It is denoted A' or A^c or \bar{A} The event A and its complement A' are mutually exclusive and exhaustive.	When we roll a die, the event 'rolling a 5 or 6' and the event of rolling a 1, 2, 3 or 4 are complementary events.