

CHAPTER 15

Probability

Compound Event:

If an event has, more than one “Elementary event” of the random experiment is called “Compound event”.

Example:

On rolling a die, we have sample space $S = \{1, 2, 3, 4, 5, 6\}$.

Then, the events E : Getting an even number = $E = \{2, 4, 6\}$

F : Getting an odd number = $F = \{1, 3, 5\}$ are all compound events.

Note:

Equally likely events:

Events that have an equal chance of occurrence are called “Equally likely events”.

Example:

When a coin is tossed both heads and tails have an equal chance of occurrence.

Not equally likely events:

Events that do not have an equal chance of occurrence are not “Equally likely events”.

Example:

Suppose that there are four red balls and six green balls in a bag. There are more green balls than red balls. Hence, when a ball is randomly picked, the chances of getting a green ball are more.

Sure Event:

The whole sample space (s) of an event say “E” is “1”, then event “E” is called a “Certain event or Sure event”.

Example:

On throwing a die, we have sample space $S = \{1, 2, 3, 4, 5, 6\}$.

Let $E =$ Event of getting a number is less than 7.

Then, $E = \{1, 2, 3, 4, 5, 6\}$. So, E is a “Sure event”.