## Class IX: Math Chapter 15: Probability Chapter Notes

## Top Definitions

1. Probability is a quantitative measure of certainty.
2. Any activity associated to certain outcome is called an experiment. e.g. (i) tossing a coin (ii) throwing a dice (ii) selecting a card.
3. A trial is an action which will result in one and several outcomes.
4. An event for an experiment is the collection of some outcomes of the experiment. E.g (i) Getting a head on tossing a coin (ii) getting a face card when a card is drawn from a pack of 52 cards.

## Top Concepts

1. Probability of an event lies between 0 and 1 .
2. Probability can never be negative.
3. A pack of playing cards consist of 52 cards which are divided into 4 suits of 13 cards each. Each suit consists of one ace, one king, one queen, one jack and 9 other cards numbered from 2 to 10 . Four suits named spades, hearts, diamonds and clubs.
4. King, queen and jack are face cards.
5. The two possible outcomes of tossing a coin are head and tail.
6. The sum of the probabilities of all elementary events of an experiment is 1 .

## Top Formulae

1. The empirical (experimental) probability of an event $E$ denoted as $P(E)$ is given by:
$P(E)=\frac{\text { Number of trial in which the event happenend }}{\text { Total Number of Outcomes }}$

## Top Diagrams

1. Suits of Playing Card

2. Face Cards

