

Class 9
Important Formulas
Chapter 15 - Probability

S.no	Term	Description
1	Empirical probability	<p>It is a probability of event which is calculated based on experiments</p> $\text{Empirical Probability} = \frac{\text{No. of trials which expected outcome}}{\text{Total number of trials}}$ <p>Example:</p> <p>A coin is tossed 1000 times; we get 499 times head and 501 times tail,</p> <p>So empirical or experimental probability of getting head is calculated as</p> $p = \frac{499}{1000} = 0.499$ <p>Empirical probability depends on experiment and different will get different values based on the experiment</p>
2	Important point about events	<p>If the event A, B, C covers the entire possible outcome in the experiment. Then,</p> $\mathbf{P(A) + P(B) + P(C) = 1}$
3	impossible event	<p>The probability of an event (U) which is impossible to occur is 0. Such an event is called an impossible event</p> $\mathbf{P(U) = 0}$
4	Sure or certain event	<p>The probability of an event (X) which is sure (or certain) to occur is 1. Such an event is called a sure event or a certain event</p> $\mathbf{P(X) = 1}$
5	Probability of any event	<p>Probability of any event can be as</p> $0 \leq P(E) \leq 1$