anodiam
Education that enlightens!

Probability

1. **Probability** is a quantitative measure of certainty.
2. Any activity associated to certain outcome is called an **experiment**. For example: (i) tossing a coin (ii) throwing a dice (iii) selecting a card.
3. An **outcome** is a result of a single trial of an experiment. For example: two possible outcomes of tossing a coin are head and tail.
4. An **event** for an experiment is the collection of some outcomes of the experiment. For example: (i) Getting a head on tossing a coin (ii) getting a face card when a card is drawn from a pack of 52 cards.
5. The **empirical (experimental) probability** of an event E denoted as P(E) is given by:

$$P(E)=\frac{\text{Number of trials in which the event happenend}}{\text{Total number of outcomes}}$$

6. Probability of an event lies between 0 and 1. Probability can never be negative.