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PROBABILITY

Probability theory is nothing more than common sense reduced to calculation.

- Pierre Simon Laplace.



Richard Von Mises
(AD (CE) 1883-1953)

The statistical or empirical, attitude towards probability has been developed mainly by R.F.Fisher and R.Von Mises. The notion of sample space comes from R.Von Mises. This notion made it possible to build up a strictly mathematical theory of probability based on measure theory. Such an approach emerged gradually in the last century under the influence of many authors.

Learning Outcomes



- To understand the basic concepts of probability.
- To understand the classical and empirical approach of probability.
- To familiarise the types of events in probability.



9.1 Introduction

To understand the notion of probability, we look into some real life situations that involve some traits of uncertainty.

A life-saving drug is administered to a patient admitted in a hospital. The patient's relatives may like to know the probability with which the drug will work; they will be happy if the doctor tells that out of 100 patients treated with the drug, it worked well with more than 80 patients. This percentage of success is illustrative of the concept of probability; it is based on the frequency of occurrence. It helps one to arrive at a conclusion under uncertain conditions. Probability is thus a way of quantifying or measuring uncertainty.

