Types of probability science

Characteristics, laws and benefits

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Sentence Transformations

The definition of probability is that it is a branch of mathematics that specializes in analyzing random phenomena, as it is natural that an individual cannot know the inevitable results of a phenomenon before it actually occurs, but by establishing possible results for it, the actual result can be predicted by chance.

Basic concepts in probability science

Experience

simple space

the event

Relative frequency of the result

Outcomes with equal probability

Types of possibilities

Theoretical possibility :

It is the probability that, during its occurrence, depends mainly on logic, such as the theoretical probability that occurs during a mock throw equals 0.5

Intuitive possibility :

This type of probability is based on a set of rules or axioms developed by the mathematician Kolmogorov.
These rules were called Kolmogorov's Three Rules after him, and these rules are used according to this approach .

Frequent possibility:

It occurs in a relative manner, as this probability depends on two points, which are the number of times the event occurs in the largest number of repeated attempts.
Through this type, the rate of occurrence of an event under certain conditions is known over the long term .

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Types of possibilities

Personal or implied probability:

This type of possibility depends on what a person believes, according to his apparent experiences, which differ from one person to another.
For example, the probability that a certain horse will win in a horse race, the person who has this probability may be due to his experience in horse racing, which made him expect this result.
Types of accidents in probability
Probability accidents are divided

Experimental probability :

It is the probability that depends primarily on experience, and an individual can calculate it by dividing the number of times the probability was repeated by the number of times the experiment was repeated.
For example, if an individual tosses a coin ten times and heads are recorded six times, the experimental probability of this experiment is 6 ÷ 10 = 6.

Probability accidents are divided into the following types

Independent incidents

It is one in which none of the events is affected by the other, no matter how many factors it exposes.

Two mutually exclusive events

These are two events that can never be done together at the same time.

Non-independent or conditional events

These are accidents whose occurrence is affected by the occurrence of other accidents.

The benefits of probabilities in our daily lives

The science of probability has important benefits for our daily lives, as this science helps us to:

Making certain decisions related to the fate of our lives.
This science can be used when we are not sure whether specific things will happen.
For example, what happens with some students who decide to stay away and not study part of the curriculum due to the possibility of not taking this part in the exam, or to cancel a trip due to expected bad weather conditions, while preparing for it by making the necessary arrangements for it.

THANKS FOR WATCHING