Probability games

Education

Probability Games Probability Games Playing the probability games coin flip and dice roll was fun. One is introduced on the topic of probabilities by performing the two games. Probabilities may be determined through empirical or experimental method and theoretical method. An experimental method is one where the outcomes are observed by doing the experiment several times, like flipping the coin repeatedly (Homepages. ius. edu, n. d.). The relative frequencies are then determined. The theoretical method is when one does not have to do the experiment, the probability is determined through computations.

The coin flip has only two probable outcomes, that is, either it is heads or tails. One flipped the coin twenty times and got a result of eleven heads and nine tails. Although flipping a coin is said to have an equal chance of coming up on either side, one's experience did not have such a result. This may be due to the fact that the experiment was only made twenty times. According to frequentists, " the probability of getting a heads is 1/2, not because there are two equally likely outcomes but because repeated series of large numbers of trials demonstrate that the empirical frequency converges to the limit 1/2 as the number of trials goes to infinity" (Edurite. com, n. d.).

`When one played the dice roll, one realized that the outcomes are much more than the coin flip because each die has six sides. The other die has also six sides; thus, rolling the two dice at the same time would mean that there are greater possible outcomes. It is therefore harder to predict the results of the dice roll than the coin flip.

The method that will be difficult for children to understand is the theoretical method because it is difficult to imagine it. Experimental probabilities are easier to understand because they can see it clearly, such as the coin

flipping. For children, using formulas to determine the probabilities is quite a challenge.

Through the games that one played, one learned that in determining probabilities, it is important that one knows what the likely outcomes of the experiment are. One also learned that some outcomes may have equal likely outcomes while others may be mutually exclusive events (Homepages. ius. edu, n. d.). There are also some events which may be non-mutually exclusive, which means that some events may have common outcomes (Homepages. ius. edu, n. d.).

The study of probabilities is very relevant to decision making. Although, the experiment that one performed by playing the coin flip and the dice roll may not be so important, one realizes that the study of probabilities are useful. It can be used for investment problems, introducing new products and inventory decisions (Nazir, 2008). Determining the probability of an event happening, such as the result of an election is quite a challenging task. Others may think, leave the computations to the statisticians and just be content with a simple game of coin flipping and rolling the dice.

References

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