TEACHING SUBJECTS ON THE THEORY OF PROBABILITY IN SCHOOL MATHEMATICS LESSONS WITH THE HELP OF LIFE EXAMPLES

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Abstract: This article talks about the effectiveness of teaching topics related to the theory of probability in school mathematics classes with the help of real examples. Examples and issues related to it are developed.

Key words: mathematics, curve, combinatorics, random.

As we all know, all textbooks of the school are currently being revised and reprinted. Along with these textbooks, a lot of innovations were introduced to the mathematics textbooks. Previous textbooks did not include topics such as combinatorics and probability theory. These topics are introduced as news. Probability theory is one of the topics related to life. Therefore, it will be much more effective to explain the topic of probability theory to schoolchildren on the basis of life issues. Because a person faces various issues in his life every day. From these cases, it follows that a person has acquired theoretical knowledge in making the right decision. In particular, knowing the theory of probability, a person can easily solve these problems.

Probability theory covers different areas of life. For example, economy, construction, medicine, education, etc. Everything we do in life has a probability. If we can know this probability, we can find the probability of the outcome of our work. This thing happens almost every day in practical life. Therefore, when explaining the theory of probabilities to students in school, it is appropriate to explain as much as

possible through real life examples. Then the students' attention and interest in the lesson will increase.

In passing the topics of probability theory at school, explaining not only the standard issues within the scope of the topic, which are presented in many literatures, but also through vital and understandable issues related to interesting fields for students, increases the interest in the lesson and also about the practical importance of the topic in the minds of the students. imaginations appear and their motivation to learn science increases.

Probability theory is a field of mathematics that deals with finding the probability of occurrence of other random events, which are connected in some way, according to the probability of occurrence of any random events. Now let's get acquainted with the examples of probability theory.

Examples:

The first example given below can be found in the field of many businesses. 1.There are n valid details in a batch of N details. m details are taken at risk. Find the probability that there are at least k valid details among the received details. *Solving.* The number of groupings that can be made of m elements from N elements can be obtained by C_n^k methods, in which the remaining m details are invalid. Necessary, and m-k invalid details can be obtained by C_{N-n}^{m-k} method among N-n invalid details. So, the number of convenience events is equal to $C_n^k \cdot C_{N-n}^{m-k}$.

Probably what you're looking for

$$P = \frac{C_n^k \cdot C_{N-n}^{m-k}}{C_N^m}$$

The second example given below can be found in the process of various games.

2.A box containing 9 white, red and blue balls contains 4 white and 3 red balls. Find the probability of getting a non-blue ball from the box.

Solving. Let the event A represent the fact that the received ball will be white, and the event V will represent the event that it will be colored. If the ball you

received is not blue, it is white or bluemeans it will be colorful. According to the definition of probability:

$$P(A) = \frac{4}{9}, \ P(B) = \frac{3}{9} = \frac{1}{3}$$

Now, based on the addition theorem, we find the probability of a non-blue ball coming out:

$$P(A + B) = P(A) + P(B) = \frac{4}{9} + \frac{1}{3} = \frac{7}{9}$$

In our third example, we will learn to find the probability of winning in winning games that occur in life.

3. There are 4,000 lotteries, 450 of which are winners. One of these tickets was taken by accident. Find the probability of his winning event.

Solution: According to the probability formula:

$$P = \frac{450}{4000} = \frac{9}{80}$$

In conclusion, it is necessary to regularly teach the theory of probabilities to schoolchildren in relation to life. It is necessary to take into account the interests of the students when conducting educational activities. Accordingly, it is necessary for teachers to correctly apply educational strategies in the teaching process.

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