

THE SCIENCE OF MATHEMATICS AND ITS IMPORTANCE IN HUMAN LIFE.

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Abstract: Today, in our country, great attention is paid to mathematics, which has a deep historical basis and is one of the most important subjects for modern development. We can safely say that this science, which was laid the foundation stone by our great ancestors such as Muhammad Khorazmi, Ahmad Farghani, Abu Rayhan Beruni, Mirzo Ulugbek, has entered a new stage of development in recent years. This article provides information about the science of mathematics, the development of science in our country, and its importance in human life. given

Key words: Mathematics, learning, logical observation, projective geometry, knowledge.

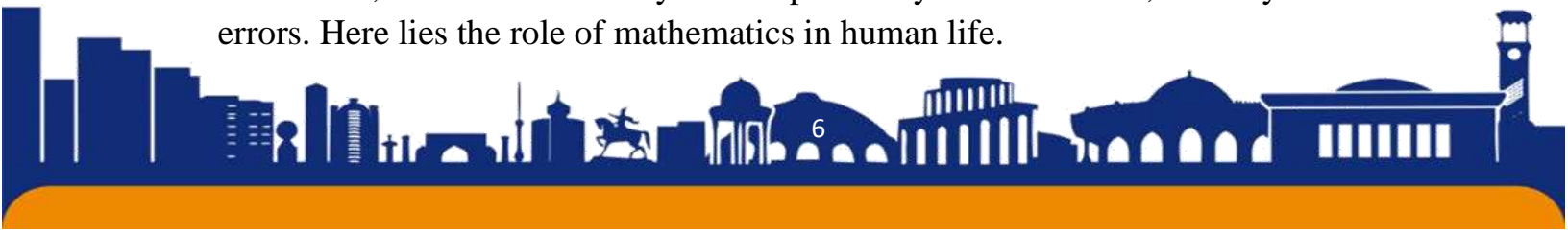
According to experts, a student who has mastered mathematics well has a high level of analytical and logical thinking. He develops the ability to quickly make decisions, discuss and negotiate, and do things step by step, not only when solving examples and problems, but also in various situations in life. Also, the thinking typical of mathematicians takes him to the level of predicting the future activities and events happening around him.

Mathematics (from ancient Greek: - "knowledge", "science") is the science of knowledge based on clear logical observations. Since its original object was counting, it was often considered the "science of calculation" (calculations, even operations on formulas, occupy a very small place in today's mathematics). Mathematics is one of the oldest sciences, it has gone through a long history of development, and along with it, the answer to the question "what is mathematics?" has changed and deepened. In Greece, mathematics meant geometry. Algebra and trigonometry expanded the concept of mathematics in the 9th-13th centuries. After analytical geometry, differential and integral calculus took the main place in mathematics in the 17th and 18th centuries, until the beginning of the 20th century, it was defined as "the science of quantitative relations and spatial forms". At the end of the 19th century and the beginning of the 20th century, various geometries (such as Lobachevsky geometry, projective geometry, Riemannian geometry), algebras (such as Boolean algebra, quaternion algebra, Keli

algebra), infinite-dimensional spaces, and very diverse, often artificial objects, began to be studied. with the above definition of mathematics has become too narrow. During this period, as a result of the formation of a unique observation style and language based on mathematical logic and the theory of sets, the idea that the most basic feature in mathematics is strictly logical observation emerged (J. Peano, G. Frege, B. Russell, D. Hilbert). In the middle of the 20th century, a group of French mathematicians under the pseudonym Bourbaki, who revised the definition of mathematics, developed this idea and defined it as "Mathematics is the science of mathematical structures." Although this approach was broader and more precise than the previous definitions, it was still limited - relations between structures (for example, mathematics, set theory, algebraic topology), practical and applied theories, especially mathematical models in physics, technology and social sciences, did not fit into the scope of this definition.

Taking into account the incomparable role of mathematics in our lives, this subject is included in school textbooks from the first grade, and in our country, along with all specific subjects, mathematics education is being improved based on the requirements of the times, the latest pedagogical and innovative methods, multimedia are used in its teaching. great attention is being paid to the introduction of tools and information and communication technologies. In particular, the importance of connecting academic subjects with life, solving practical examples and problems, involving students in independent research and learning is incomparable. In the course of the lesson, the student should not feel as if he is forced to the desk, but on the contrary, it should be achieved that he participates in the lessons with great enthusiasm and strong desire. It is important for the student to deeply understand that mathematical knowledge is useful not only in questions and exams to get a grade, but also at home, in the work process, in sports and art, in trade, in trade - in every moment of life. . For this, it is necessary for the teacher of this subject to directly relate the topics covered with life and to teach how to solve an example or problem, tasks using simple situations in life.

Often, in mathematics, adults do not have the strength of a child, and not everyone knows. This happens, for example, when mom or dad asks for help with a problem, only to shrug their shoulders and say that they can't do it. And the child himself is forced to look for the answer, make mistakes and look again. In addition, parents simply refuse to help. "You have to do it yourself," they say. And they are doing it right. After many hours of attempts, the child acquires not only the ability to do homework, but also the ability to independently find solutions, identify and correct errors. Here lies the role of mathematics in human life.



Of course, independence, the ability to make decisions, to answer for them, not to be afraid of mistakes are developed not only in algebra and geometry classes. But these disciplines play an important role in the process. Mathematics develops qualities such as determination and activity. True, a lot depends on the teacher. Improper presentation, excessive rigidity and pressure, on the contrary, can provoke fear of difficulties and mistakes (first in classes, then in life), reluctance to express opinions, passivity.

After graduating from university or college, adults do not stop solving mathematical problems every day. How to catch the train? Can I cook dinner for ten guests from one kilogram of meat? How many calories are in a dish? How long does one light bulb last? These and many other questions are directly related to the queen of sciences and cannot be solved without them. It turns out that mathematics is almost always present in our lives. Often we don't even notice it.

Mathematics affects many areas of society and individual life. Some professions cannot be imagined without them, many appeared only due to the development of its individual fields. Modern technological progress is closely related to the development and development of mathematical apparatus. If people did not know the queen of science, computers and telephones, airplanes and spaceships would never have appeared. However, the role of mathematics in human life is not limited to this. Science helps a child master the world, teaches him to interact with it more effectively, and forms individual characteristics of thinking and character. However, mathematics alone could not solve such problems. As mentioned above, the delivery of material and personal characteristics of the person who introduces the child to the world plays a big role.

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