

## ECONOMIC DIRECTIONS IN TEACHING MATHEMATICS

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### Abstract:

This article provides information about the important aspects of the economic direction in the teaching of mathematics.

**Key words:** financial literacy, budget, mathematical algorithms, portfolio, mathematical engineering, interest rates, balance sheet.

In recent years, there has been a growing trend to focus on economic applications in the teaching of mathematics. This approach helps students develop the analytical and problem-solving skills needed in the workforce.

One of the main areas of focus in this approach is financial literacy. Students learn how to use mathematical tools to make informed decisions about personal finances, such as budgeting, saving, and investing. They are taught to understand interest rates, compound interest calculations, and financial documents such as balance sheets and income statements.

Another important aspect of economics majors in teaching mathematics is understanding how data and statistics can be used to make decisions. Students study probability and statistics to analyze data and make predictions. They also learn to critically analyze data presented in graphs and charts and draw meaningful conclusions.

Teaching mathematics can have a significant impact on the economic development of a country. Mathematics is the basis for many advanced fields such as engineering, natural sciences and computer science. Therefore, preparing students for mathematics is crucial for their future profession and the general development of society.

In order to improve the economic direction of teaching mathematics, pedagogues can focus on the practical application of mathematical concepts. For example, teachers can include economic problem-solving exercises such as analyzing the inflation rate, calculating interest rates, or learning about income and taxation. By providing insight into the real-life applications of mathematical concepts, teachers can inspire students to apply their mathematical skills to solve real-world economic problems.

Incorporating technology into teaching mathematics is also a good direction. Computer-based software such as interactive multimedia resources and data visualization tools help students learn important economic concepts in a more engaging way. The use of technology enables the creation of sophisticated simulations and augmented reality tools that provide hands-on, more interactive pedagogy.

In general, teaching mathematics with an emphasis on its economic value and combining it with modern technology will make learning more practical for students and at the same time promote economic development.

Teaching mathematics from an economic perspective helps students better understand the importance of mathematics in real-world situations. This approach may include topics such as personal finance, taxes, investments, and business mathematics. By incorporating economic principles into math lessons, students can develop critical thinking skills and improve their financial literacy.

One of the potential economic directions of teaching mathematics in higher educational institutions is to focus on the development of applied mathematical skills in areas of high demand among students. This includes designing curriculum and course materials that emphasize practical problem-solving skills, as well as case studies, internship opportunities, and other experiential learning activities that connect students with real-world applications of mathematical concepts. Another economic avenue could be the use of technology and online learning platforms to create a more accessible and cost-effective learning experience for students, removing barriers to entry for students who might otherwise struggle to access higher education. In addition, the use of open educational resources can reduce the cost of purchasing educational materials, which can be beneficial for students from low-income families.

In addition, mathematics is an important tool in economics for optimization problems, linear and non-linear models, and game theory. Mathematical models and algorithms are widely used in finance, especially in portfolio management, risk analysis, and option pricing.

In conclusion, the inclusion of economic applications in the teaching of mathematics helps students to develop practical skills for the workforce and to become financially literate individuals. Mathematics gives them the ability to make sound decisions based on data-driven analysis and critical thinking.

## **BIBLIOGRAPHY:**

- 1.O‘zbekiston Respublikasi Prezidentining 2020-yil 26-martdagi PF-5975-son Farmoni
- 2.G‘ulomov S.S. va boshqalar. Axborot tizimlari va texnologiyalari: Oliy o‘quv yurti talabalari uchun darslik /Akademik S.S. G‘ulomovning umumiy tahriri ostida. – T.: «Sharq», 2000.
3. Nasretdinova Sh. Excel 7.0 jadval hisoblagichlari. Moliya va bank akademiyasi nashriyoti, T., “Moliya”: 2000 y.
4. Yusupov A.I., Quromboyev H.N. Islom Karimov nomidagi Toshkent davlat texnika universiteti uzmu\_1121@inbox.ru
5. Азизхўжаева Н.Н. Педагогик технология ва педагогик маҳорат. – Т.: Фан, 2006.
6. Zunnunov A, Maxkamboyev U. Didaktika: Oily o‘quv yurtlari talabalari uchun o‘quv qo‘llanma.-T.: “Sharq” 2006
7. Jumayev M.E, Matematika o‘qitish metodikasi (KHK uchun ) Toshkent. “Ilm Ziyo” 2011 yil.