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MATHEMATICAL METHODS IN ECONOMICS

The penetration of mathematics into economy can be observed from the ancient times. So, when studying the laws of king Hammurabi (1792-1790 to B. C.) we can make a conclusion about the considerable development of commodity-money relations in Babylonia. Xenophon (430-354, to B. C.) in his treatises “About the household” and “About the income” introduces the concept of exchange value of goods as the possibility to exchange one product for another. In Aristotle (384-322 B. C.) treatise “Policy” money is the measure of importance of item in the process of exchange. So, in ancient times with the development of commodity-money relations in economy appears such a phenomenon as the measure of quality. It can be characterized as the application of arithmetic in the economy. [3]

The development of the application of mathematical methods in economics marked the twentieth century. The use of them is associated with the works of almost all Nobels prize laureates: D. Hicks, G. Solow, V. Leont'ev, P. Samuelsson.

The methods of elementary mathematics, classical mathematical methods of analysis, statistical methods, economic methods, methods of mathematical programming are widely used in economics. [1]

They all speed up the transactions execution in the economy, taking into account the influence of various factors and performance, improve the accuracy of calculations. [2]

Mathematical-economic methods are widely used in the field of management and maintenance, in agriculture, in a market economy (model of Viroso, model of Evans), and others.

So, mathematics complements the economy. And mathematical methods make the use of economics more convenient and wider.

LITERATURE

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