IMPROVING THE LEVEL OF MOTIVATION IN MATHEMATICS EXPERIENCE FOR RESOLVING PROFESSIONAL INTEGRITY PROBLEM

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The article deals with the methodological aspects of the formation of professional competencies of higher and pre-higher education applicants in the specialty 051 «Economics» by way of solving professionally oriented problems by means of differential calculus. Examples of problem solving for students with an economics study profile are provided. The applied nature of the tasks under consideration is to combine the study of higher mathematics with the special training of future specialists and to enable them to gain experience in solving industrial problems, to increase their professional competence, which is very important in the time of fierce competition in the labor market. To solve a problem means to make the best decision in a particular situation. Solving stereotypical problems does not provide students with professional orientation, because it does not depart from the formulation of basic concepts, definitions, etc. For each profession, tasks with professional content are selected, which contain more specific data, important details, and thus cause considerable interest and increase students' motivation to study higher mathematics.

It should be noted that the use of professional tasks in classes on higher mathematics is very important for the educational process, because: the educational process is activated; the level of education in higher mathematics is increasing; communication with the future profession is provided; help is rendered to understand better the subject and fully understand the need for its study to master the chosen profession.

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Pedagogical experience of introducing theoretical and practical content related to the future speciality into the practice of teaching the subject "Mathematics" to students of the NAU College of Computer Technologies and Economics confirms the increase of motivation for studying mathematics, interest in mastering mathematical apparatus and has a positive effect on the effectiveness of training. Provision of applied orientation of the subject, use of professionally oriented problems, illustration of the use of differential calculus through solving problems of economic nature are the most effective means of developing the creative activities of a student, contribute to the formation of both mathematical competence of a college graduate and the professional one. However, for mathematics teachers in higher and pre-higher education there are creative tasks to be solved for finding and putting into practice new theoretical concepts and developing practical issues for applying matrix theory, linear algebra, integral calculus, differential equations, probability theory and mathematical theory in a professionally oriented way so as to embrace different industries and spheres of life, which will help prepare future professionals for effective work in their speciality.

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