

This bachelor thesis is focused on creating a set of physical tasks with a structured solution to the chapter Mathematical supplements in the Electronic Collection of Solved Problems in Physics. After studying the actual collections and textbooks used in high schools it was found that in most of them the mathematical apparatus which is necessary for studying physics at universities in the first semester is not mentioned. This was the primary cause of the creation of sixteen tasks using the basic mathematical methods in physics, especially the basics of differential and integral calculus. Commented solutions have been created in order to familiarize the solver with basic mathematical apparatus which is needed to study physics at university. They should bring promising results in individual studying and lead the student to be active at solving the problem.