

Abstract

The thesis is devoted to the use of the algorithms and the principles in mathematical education, especially in the education of the divisibility. It is based on study of the Czech secondary school textbooks which were published since 1852. We mention briefly the history of the system of education since 1848 as well as the theory of divisibility. There are analyzed the algorithmic methods connected with divisibility commented in these textbooks. Two applications of the algorithms are pointed out. The algorithms can be used in education of talented students as it is done in the mathematical course of the Talnet project. The principles are the fundamentals of commentary of the textbooks, the principle of induction is the base of the divisibility. In the appendix, there is a demonstration of graduated development of algorithm in the case of the Euclid algorithm.