Problem solving using Geogebra

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ABSTRACT

Problem solving is an important component of teaching mathematics. It is a way to present mathematics and it is also a skill which enhances logical reasoning. In this paper the two different approaches toward the problem solving will be presented. The first one is classical and the other one is by using Geogebra. The steps of both parallel solutions of several math problems of different levels will be analyzed in order to illuminate specific benefits from each. The group of students from the third grade who are familiar with Geogebra took part in number of exercises and their experience in this specific problem solving will also be presented.

Problems of different levels and several mathematics topics (such as geometry, analytic geometry or algebra) have been considered in this work. The students (seventeen years old) chosen are those who are a bit more interested in mathematics then the others. They are studying in the third grade (out of four) of mechanical engineering high (secondary) school in Novi Sad.

Keywords

Math teaching, logical reasoning, problem solving, Geogebra