

ABSTRACT

This diploma thesis is about an analysis of a problems in the mathematical competition Pangea. In a theoretical part are mentioned different theories about mathematical problems, processes of problems solving and various problem-solving strategies. There is also described principle of an analysis a priori based on Lucie Grugnetti and Françoise Jaquet, an analysis a posteriori and information about a competition in general and specifically about the mathematical completion Pangea. The goal of this thesis is to analyse a priori the problems in school round for fifth grade in school year 2020/2021 and based on it and a success rate of solving problems analyse the problems a posteriori. The analysis is based on conception of Grugnetti and Jaquet, which I reworked for needs of this thesis. In the end is a generalization of results of the analysis a priori and based on it I evaluate that the mathematical competition Pangea adhere to its declared goal in problems preparing, so the problems are motivating a diverse. That is thanks to a various spectrum of needed knowledge and abilities for the problem solving and also e.g. thanks to interesting contexts of the problems.

KEYWORDS

Analysis a priori, analysis a posteriori, mathematical competition, mathematical problem, problem solving