



# Supporting the theory of math didactic using knowledge-measuring questions and analysis of the solutions

SÁNDOR KÁNTOR and PÉTER FEJES-TÓTH

*Abstract.* New or rediscovered results presented in this paper are the results of the analysis of the problem sets used in the two-tier system secondary school final examination in mathematics, a system that was introduced in Hungary in 2005.

Many of the revealed problem arise in connection with misunderstanding the text of the problems. Causes of misinterpretation can be either that the text is lacking some important information, or that it should be interpreted not in word-to-word manner.

Theses and their argumentations presented here refer partly on the new types of problems (tests, non-standard mathematical contents), and partly on improvement of learning-teaching process in topics of equations and approximations.

*Key words and phrases:* analysis of the problem sets, misunderstanding the text of the problems.

*ZDM Subject Classification:* D20, D50.

SÁNDOR KÁNTOR  
INSTITUTE OF MATHEMATICS  
UNIVERSITY OF DEBRECEN  
H-4002 DEBRECEN, EGYETEM TÉR 1.  
HUNGARY

PÉTER FEJES-TÓTH  
INSTITUTE OF MATHEMATICS  
SZENT ISTVÁN UNIVERSITY  
BUDAPEST, HUNGARY

*E-mail:* [kantor.sandor@science.unideb.hu](mailto:kantor.sandor@science.unideb.hu)

*E-mail:* [fejestothpeter@yahoo.com](mailto:fejestothpeter@yahoo.com)

*(Received April, 2016)*