

# LEARNING TOOLS BASED ON REALISTIC MATHEMATICS EDUCATION TO IMPROVE STUDENTS' HOTS AND ATTITUDE TOWARDS MATHEMATICS

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## ABSTRACT

**Abstrac:** High Order Thinking Skill and attitude towards mathematics are abilities that must be intensified to improve the quality of students, so that students can compete in the industrial era 4.0. This study aims to produce a feasible learning tool and determine the effectiveness of RME-based learning tools to improve students' HOTS and attitude towards mathematics. The type of this study is development research with the ADDIE development model, namely analyse, design, development, implementation, and evaluation. The population of this study were all 8th grade students at SMP Negeri 1 Ngemplak. The samples of this study were 32 students of class E and F. The method of this research is quasi-experiment. The research instruments consisted of product validation sheet, HOTS questions, and attitude towards mathematics questionnaire. The validation sheet analysis technique uses standard deviation and the effectiveness of the device product uses the Manova test. The results of the validation sheet analysis showed that the RME-based learning tool product is feasible to be used to improve students' HOTS and attitude towards mathematics according to experts and the Manova test results showed that the RME-based learning tool product is effective in improving students' HOTS and attitude towards mathematics.

Kata Kunci: *Realistic Mathematics Education, HOTS, attitude towards mathematics*