

## ABSTRACT

**NANDA EKA RAHAYU.** The Use of Scaffolding Strategy and Realistics Mathematics Education to Improve Students' Mathematical Problem Solving Towards Pythagorean Theorem at Class VIII-A of SMP Negeri 279 Jakarta. Mini Thesis. Jakarta: Study Program of Mathematics Education, Faculty of Mathematics and Science, State University of Jakarta, 2017.

The purpose of this research is to improve students' mathematical problem solving towards pythagorean theorem at class VIII-A of SMP Negeri 279 Jakarta using scaffolding strategy and realistics mathematics education. Students' mathematical problem solving is represented by four indicator, there are identifying problem, devising plan, carrying out the plan dan looking back the answers.

The classroom action research was held in collaborative and participative ways. The research was conducted in 3 cycles, the first cycle consisted of two meetings, the second cycle consisted of two meetings, and the third cycle consisted of one meeting. In every cycle, students were given a posttest in order to measure their mathematical problem solving. The instruments that were used for collecting data in this research are observation instrument, test instrument, field notes, documentation tools, and interviews' manual. The data collection was done by observation, test, interview, and documentation. Descriptive data were analyzed qualitatively and quantitatively.

The results showed that the learning of mathematics through scaffolding strategy with realistics mathematics education could improve students' mathematical problem solving. It was shown by an increase in the final test score of the ability in mathematical problem solving provided during each cycle. Students' average score of mathematical problem solving ability in class VIII-A on the first cycle is 50,0 and increase on the second cycle with score 52,2, and on the last cycle become 76,4. The total of students who have score in criteria B increased. In first cycle 5,8% students have scroe in criteria B and on the second cycle also 5,8%. Then in the last cycle students who have score in criteria B increased become 85,7% from the total students in the class.

*Keywords: Mathematical problem solving, Scaffolding strategy, RME, Pythagorean Theorem*