## ABSTRACT

SURYADI, Efforts to Improve Mathematical Representation Ability Through The Implementation of Cooperative Model Think Talk Write (TTW) with Triangle and Tetragon Subject in VII E Class of SMP Negeri 20 Jakarta. Skripsi. Jakarta: Mathematics Education, Faculty of Mathematics and Natural Science, State University of Jakarta, 2016.

Observation and the result of mathematical representation preliminary test in VII E class of SMP Negeri 20 Jakarta show that the ability of mathematical representation in VII E class is still below the category, then the ability should be enhanced. Implementation of Cooperative Model Think Talk Write (TTW) can be used as an alternative learning in the class. Model Think Talk Write (TTW) consists of three steps: Think, Talk and Write wherever each step can increase the student's ability of mathematical representation. This research aims to improve student's ability of mathematical representation through the Implementation of Cooperative Model Think Talk Write (TTW).

This research is classroom action research that is held with three cycles where each cycle has four stages: planning, implemenation, observation and reflection. Every cycle is held with Cooperative Model Think Talk Write. In the end of every cycle, the test are given to the student to measure how far their ability of mathematical representation goes. This research is held on April untill Mei 2016 in VII E clas of SMP Negeri 20 Jakarta with 36 students.

The result shows that learning mathematics through the implementation Cooperative Model Think Talk Write (TTW) can improve student's ability of mathematical representation. It is shown by an increase of the average score of the test. The average score from the frist cycle is 46,05, then it increases to 67,17 on the second cycle and it reaches 84,03 on the third cycle. The number of student who is reaching out the limitation of ability of mathematical representation (KKM) score is also increasing. There are 5,56% of 36 students that can reach out the KKM score on the first cycle, then it is increasing to 33,33% of 36 students on the second cycle and there are 91,67% of 36 students reach out the KKM score.

**Keywords: Mathematical Representation, Model Think Talk Write**