## THE DIFFERENCE OF STUDENTS' PROBLEM SOLVING ABILITY BY USING COOPERATIVE LEARNING MODEL TYPE THINK-PAIR-SHARE (TPS)AND TYPE STUDENT TEAMS-ACHIEVEMENT DIVISION (STAD) IN THE TOPIC OF TRIGONOMETRY IN GRADE X OF SMA NEGERI 1 PERBAUNGAN A.Y. 2013/2014

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## ABSTRACT

This research is a quasi experimental to determine whether there is difference students' problem solving ability who taught by cooperative learning model type TPS with students' problem solving ability who taught by type STAD in the topic of Trigonometry in grade of X SMA Negeri 1 Perbaungan A.Y. 2013/2014.

The population is used all students of SMA Negeri 1 Perbaungan in the year 2013/2014. Sample selected by cluster random sampling is a class XU-1 by 20 students as a class experimental A with cooperative learning model TPS (Think-Pair-Share) and class XU-2 by 20 students as a class experimental B with cooperative learning model STAD (Student Teams-Achievement Division). To obtain the necessary data used in this study to test the form of essays that look at students' mathematical problem solving ability. Before the test is defined as a data collection tool, first piloted by two lecturers from the Department of Mathematics in State University of Medan and one mathematics teacher in SMA Negeri 1 Perbaungan.

From the analysis of the data obtained average posttest results of the experimental class A is 83.12 and the average value of the posttest results of the experimental class B is 71.62. Prior to hypothesis testing is done first seen normality and homogeneity of data such posttest. Normality was tested using *Kolmogorov-Smirnov test* and homogeneity by using the *Levene's test* from tests performed with SPSS-18, stated that the data posttest normal distribution and homogeneous, then the hypothesis can be tested with *t test* result got that  $t_{calculation} > t_{table}$  namely  $t_{calculation} = 5.058$  and  $t_{table} = 2.024$ , then 5.058 > 2.024. This means that  $t_{calculation} > t_{table}$  then Ho is rejected and Ha is accepted. Thus it can be concluded that average students' problem solving ability who taught by cooperative learning model type TPS is not equal to average students' problem solving ability who taught by type STAD in the topic of Trigonometry in grade of X SMA Negeri 1 Perbaungan A.Y. 2013/2014.