## **ABSTRACT**

The Effect of The Problem Based Learning (PBL) Model with The License Device to The Mathematical Solving Skills and Mathematical Learning Achievements Of Class X SMAN 1 Kalianget Study Year 201-2019 in Trigonometry Materials. Kharimatul Jannah

Keyword: Problem Based Learning (PBL) Model, Mathematical Problem Solving Skill, Mathematical Learning Achievment

The purpose of this reaserch was to knowing whether or not there is effect of the *Problem Based Learning* (PBL) learning models with the literary teaching aids on (1) mathematical problem solving skills, (2) mathematics learning achievement, and (3) mathematical problem solving abilities and student mathematics learning achievements of students class X SMA 1 Kalianget 2018-2019 school year on trigonometry material.

This reaserch uses quantitative research methods. The population taken is all students of class X MIPA SMAN 1 Kalianget with samples of class X MIPA 2 totaling 32 students. The instrument used was pretest and posttest. Data analysis was performed using the t-test.

Significant level of 5% and  $t_{table} = 2,0399$  used to test variables mathematical problem solving ability, mathematics learning achievement, and mathematical problem solving ability and mathematics learning achievement.  $t_{count}$  results obtained for each of these variables in a row are 40,3852; 5,4111568; and 37,3383. The results of the t-test showed that  $t_{count} > t_{table}$  with that  $H_0$  is rejected and  $H_a$  is accepted. Therefore there is the effect of the *Problem Based Learning* (PBL) model with the literary teaching aids on (1) mathematical problem solving ability, (2) mathematics learning achievement, and (3) mathematical problem solving abilities and mathematics learning achievement of class X SMAN 1 Kalianget school year 2018-2019 on trigonometry material.