## **ABSTRACT**

Asifa Iftikhatul Jannah, 2019, Effectiveness of Problem Based Learning Assisted by Snakes and Ladders Agaisnt the Trigonometry Problem Solving Capabilities of Class XI MAN 1 Semarang City. Advisor I. Iswayudi Joko S., S.Si, M.Pd., II. Venissa Dian Mawarsari., S.Pd, M.Pd.

The problem-solving ability of students in class XI MAN 1 in Semarang on trigonometry material is still very low. Especially when given a matter of stories related to trigonometry material, students are confused in applying trigonometric formulas. Based o this problems, a study was conduced which aimed to find out. The population in this study were students of class XI MAN 1 Semarang City in 2019/2020 academic year consisting of class XI MIPA 4, XI MIPA 5 and XI MIPA 6. Data collection techniques used were observation, tests, interviews, and documentation. The data analysis technique taken in this study uses SPSS calculation, data presentation, and concludes with the conclusion. Based on the results of research and discussion that has been described in the previous chapter, it can be concluded that the application of PBL learning assisted by snakes and ladders is effective, this is evidenced by (1) the ability of problem solving has reached individual and classical completeness. The average completeness of problem solving abilities of students who use PBL learning assisted by snakes and ladders reaches KKM that is 87,243. The percentage of completeness has exceeded 95% or 35 of 37 students; (2) There is an influence of motivation and process skills on the problem solving ability of 92.9% in the application of PBL learning by snakes and ladders; (3) There is a difference in the average value of problem solving abilities in the experimental class that is 82.08 better than the average control class whose learning does not use ladder-assisted PBL by 80.26.

Keywords: Learning Achievement, PBL, Snakes and ladders.