# THE DIFFERENCE OF STUDENTS' ACHIEVEMENT IN MATHEMATICS BY USING GUIDED-DISCOVERY LEARNING MODEL AND COOPERATIVE LEARNING MODEL JIGSAW TYPE AT SMA N 3 PEMATANGSIANTAR

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## ABSTRACT

The type of this study is a quasi-experiment study. The objectives of this study is to know any difference of students' achievement in mathematics which using the model of guided discovery learning with cooperative learning model JIGSAW type in class X SMA N 3 P. Siantar.

The population of this study is all students in SMA N 3 P. Siantar. The sampling technique applied was cluster random sampling. The experimental class I that chosen is X-1 consisted of 36 students, meanwhile the experimental class II that chosen is X-6 consisted of 36 students. The instrument used to measure the students' mathematics achievement was a essay test. The normality test used was Lilliefor's test and the homogeneity test by using Fisher test. The data analysis technique was t-test at the level of significance $\alpha = 5\%$.

The study result showed that there is the difference of students' achievement in mathematics which using the guided discovery learning model with cooperative learning model JIGSAW type in grade X SMA N 3 P. Siantar where obtained $t_{calculation} = 2.504$ at $\alpha = 0.05$ and $t_{table} = t_{(0.975,70)} = 1.995$, then $t_{calculation} > t_{table}$.

**Keywords: Guided Discovery, Cooperative of JIGSAW Type, Mathematics Achievement**