# Abstrak

**Putri Wildayani Lubis, Nim 4201111022. Penerapan Model Pembelajaran Student Teams Achievement Division Untuk Meningkatkan Kemampuan Penalaran Matematis Siswa Di Kelas VIII MTsN 2 Medan**

Tujuan penelitian ini adalah untuk meningkatkan kemampuan penalaran matematis siswa setelah diterapkan model pembelajaran Student Teams Achievement Division (STAD).  Subyek penelitian ini adalah siswa kelas VIII-8 MTsN 2 Medan yang berjumlah 32 orang. Objeknya dalam penelitian ini adalah penerapan model pembelajaran *Student Teams Achievement Division*.Jenis penelitian ini adalah penelitian tindakan kelas. Data dikumpulkan melalui dua tes penalaran berbentuk essay.Tes Kemampuan Penalaran I dilaksanakan setelah Tindakan I (Siklus I) yang terdiri dari 4 soal, dan Tes Kemampuan Logika II dilaksanakan setelah Tindakan II (Siklus II) yang terdiri dari 4 soal. Hasil penelitian menunjukkan adanya peningkatan kemampuan berpikir matematis siswa yang juga terlihat pada hasil tes  penalaran matematisnya. Sebelum dilakukan tindakan, rata-rata nilai  tes diagnostik sebesar 39,75 dan tingkat berpikir keseluruhan berada pada kategori berpikir sangat rendah sebanyak 2 orang siswa (6,25%). Setelah dilakukan tindakan Siklus I dengan menggunakan pembelajaran kooperatif tipe STAD, rata-rata skor Tes Kemampuan Penalaran meningkat menjadi 69,68 dan sebanyak 22 orang (68,75%) mempunyai tingkat kemampuan penalaran kurang, artinya rata-rata kelas mengalami peningkatan sebesar 29,73.Setelah dilakukan tindakan Siklus II rata-rata nilai Tes Penalaran Matematis II sebesar 84,28 dengan jumlah siswa sebanyak 29 orang (90,63%) yang masuk dalam kategori  ketuntasan tinggi, artinya rata-rata nilai  yang dicapai mengalami peningkatan sebesar 21,15. Dengan demikian dapat disimpulkan bahwa pembelajaran dengan menggunakan model pembelajaran kooperatif tipe STAD dapat meningkatkan kemampuan penalaran matematis siswa di kelas VIII-8 MTsN 2 Medan.

**Kata kunci:** Kemampuan penalaran matematis, model pembelajaran tipe *Student Teams Achievement Division.*

# Abstract

**Putri Wildayani Lubis, Nim 4201111022. Application of the Student Teams Achievement Division Learning Model to Improve Students' Mathematical Reasoning Ability in Class VIII MTsN 2 Medan**

The aim of this research is to improve students' mathematical reasoning abilities after implementing the Student Teams Achievement Division (STAD) learning model. The subjects of this research were 32 students in class VIII-8 MTsN 2 Medan. The object of this research is the application of the Student Teams Achievement Division learning model. The type of this research is classroom action research. Data was collected through two reasoning tests in the form of essays. The Reasoning Ability Test I was carried out after Action I (Cycle I) which consisted of 4 questions, and the Logic Ability Test II was carried out after Action II (Cycle II) which consisted of 4 questions. The results of the research show an increase in students' mathematical thinking abilities which can also be seen in the results of their mathematical reasoning tests. Before action was taken, the average diagnostic test score was 39.75 and the overall level of thinking was in the very low thinking category for 2 students (6.25%). After carrying out Cycle I actions using STAD type cooperative learning, the average Reasoning Ability Test score increased to 69.68 and as many as 22 people (68.75%) had a poor level of reasoning ability, meaning that the class average increased by 29. 73. After the Cycle II actions were carried out, the average score for the Mathematical Reasoning Test II was 84.28 with a total of 29 students (90.63%) who were in the high completion category, meaning that the average score achieved had increased by 21. 15. Thus it can be concluded that learning using the STAD type cooperative learning model can improve students' mathematical reasoning abilities in class VIII-8 MTsN 2 Medan.

**Keywords:** Mathematical reasoning ability, cooperative learning model Student Teams Achievement Division type