## CHAPTER V CONCLUSION AND SUGGESTION

### 5.1 Conclusion

Based on the results and discussion of the research, the following conclusions are obtained :

1. In light of the results of the mathematical problem-solving ability test given in cycle I, cycle II, and cycle III, it was found that the mathematical problem-solving abilities of students in class VII-A SMP Negeri 37 Medan had increased. The results of the problem-solving ability test given in cycle I obtained an average of 51.09. The average score of the problem-solving ability test given in cycle II increased to 73.54 and the average score of the problem-solving ability test given in cycle III increased to 83.48 . The increase in the average score of the problem-solving ability test was caused by the better implementation of the cooperative learning model STAD type during the learning process. The increase in students' mathematical problem-solving abilities can also be seen from the increase in the average of each indicator of problem-solving ability in each cycle. The average ability of understanding problems indicator in cycle I was 83.96 , increased to 85 in cycle II and 86.09 in cycle III. The average ability of devising a plan indicator in cycle I was 49.64 , increased to 67.83 in cycle II, and 82.87 in cycle III. The average ability of carrying out the plan indicator in cycle I was 48.45 , increased to 67.77 in cycle II, and 82.83 in cycle III. The average of looking back indicator in cycle I was 16.12, increased to 66.12 in cycle II, and 82.25 in cycle III.
2. The classical completeness of students in class VII-A SMP Negeri 37 Medan after the implementation of the cooperative learning model STAD type increased. The percentage of classical completeness after the
implementation of the first cycle action was 8 ( $26 \%$ complete) out of 31 students. The percentage of classical completeness after the implementation of cycle II action increased to 20 people ( $65 \%$ complete) out of 31 students, and the percentage of classical completeness in cycle III increased to 28 people ( $90 \%$ complete) out of 31 students. Based on the conclusion drawing, this research is successful if at least $85 \%$ students achieve score of 70 .

### 5.2 Research Weakness

There are weaknesses in this research. The weaknesses of the research can be taken into consideration and improved for future researchers. The weaknesses in this research are as follows:

1. The weakness of this research is that there is no additional action from cycle II to cycle III so that the results of the second cycle reflection are not all implemented in cycle III.
2. The learning media used did not change so there was no visible impact on students' mathematical problem-solving ability.

### 5.3 Suggestion

Based on the results and discussion of the research, as well as the conclusions, the researcher provides the following suggestions :

1. Mathematics teachers should be able to apply the cooperative learning model STAD type as an alternative learning model that can be used to provide opportunities for students to solve mathematical problems by expressing their knowledge and communicating ideas to a group of colleagues so that students' mathematical problem-solving abilities increase.
2. Mathematics teachers should be able to involve students more actively in the learning process and create a fun atmosphere so that students have motivation and interest in learning mathematics.
3. Teachers should condition students to be comfortable and ready to learn before the learning process begins. Group formation should be
considered because it can cause the classroom atmosphere to be less conducive.
4. For other researchers who want to conduct similar research, they can conduct further research on other aspects of problem-solving in learning activities by taking into account to some obstacles that may occur during the research such as classroom management and how to communicate with students.

