CHAPTER V CONCLUSION AND SUGGESTION

5.1 Conclusion

Based on result of hypothesis test using significant level $\alpha=0.05$ above, it can be concluded that :

- 1. The student's problem solving ability that taught by Students Teams Achievement Division (*STAD*) is better than taught by Direct Instruction (*DI*) at class VII SMP Negeri 1 Medan Academic Year 2011/2012. It means that cooperative learning model type STAD gives a significant contribution to the student's problem solving of quadrilaterals. Based on the aspect of student's problem solving, the aspect of understanding the problem was more increase rather than making a plan, carrying out the plan, and looking back the answer.
- 2. The students' with high mathematics ability is not better than the students' with low mathematics ability in problem solving ability at both of classes.
- 3. There is an interaction between teaching model and student's mathematics initial ability to the student's problem solving. It means that both factors namely, teaching model and student's mathematics initial ability influence to student's problem solving. Since some student's with low initial mathematics ability when given the treatment can achieve the same score with student's with high initial mathematic ability.
- 4. From the observation by the observer, it can be concluded that the learning model of STAD is better than the learning model of DI when viewed from the students' activity. Students were taught through learning model of STAD were taught to have cooperated or interaction and have a responsibility to their assignment by showing or presenting their result. Students are more active in doing the questions in student sheet activity. They are more enthusiasm to do the sheet activity, they often to ask their friend in group or to ask the teacher. Students are more willing to help

- others who do not understand the subject matter, willing to listened explanation given his friend feel comfortable situation and encourage the spirit for success together. Contrast to the student who were taught through learning model of DI was occur more emphasize in listening activity to the teacher explanation in front of class.
- 5. Based on the teachers' observation that observed it can be concluding that the teacher who implement the learning model of STAD more attractive rather than who implement the learning model of DI. Because in learning model of STAD, teacher as a facilitator, means that teacher not to directly transfer his knowledge to students but also teacher can build his students' thinking then conduct them by construct group discussion of students. So, teacher can make learning atmosphere becomes useful and attractive, and in learning model of DI, teacher have a role as a knowledge transferer, means that in teaching learning process was refers to teacher centered than student centered. The teacher has a responsibility to identify learning objectives and a big responsibility for structuring the content or materials or skills and explain to students. The teachers can focus on knowledge that must be achieved by the students, because the teachers' role in this learning strategy that controls the content of material and the order information to be received by the students.

5.2 Suggestion

From the result of this research, so that suggests that can researcher given:

- 1. For teacher
 - In applying cooperative learning model of STAD, teachers should be more frequently to remind students to work together in teams, especially for the student who have low ability that often feel less confident in the process discussion so that more increase their curiosity by asking their friend in a group and for the student who have high ability to help their friend who does not understand yet.

In applying learning model of DI, teachers should be more creative in managing the classroom and should more rely on the activity of students in learning process in order to avoid the one way learning process that emphasize in teacher's role.

2. For students

- For the students with low mathematics ability, it is better to use Direct Instruction as the method of teaching to deliver the materials, so that students can enhance their problem solving.
- For the students with high mathematics ability, it is better to use STAD as the method of teaching to deliver the material since they can learn by themselves and teacher just facilitate them.

3. For other researcher

To the next researcher candidate who hold the research with the similar matter or in different grade class expected to develop this research, so that the deficiencies that occurred in this study can be improved better than previous studies and the result of the research can be useful to education progression especially in mathematics education progress.

