## CHAPTER V CONCLUSION AND SUGGESTION

## 5.1. Conclusion

Based on the results and the discussion in chapter IV, for the implementation of learning through problem-based learning model, obtained some conclusions which are the answers to the questions posed in the formulation of the problem. Conclusions are:

- The implementation of Problem-based learning model can increase students' mathematical problem solving ability in SMP Negeri I Tanjung Morawa class VIII-5 Academic Year 2015/2016.
- 2. There are increasing of students' mathematical problem solving ability after implementation of Problem Based Learning Model. It is determined based on test result in cycle I and cycle II, average score of cycle I is 2.35 with classical completeness 52.63% and average score of cycle II is 3.04 with classical completeness 86.84%. By using gain score, the increasing of average score is 0.41 is classified into medium category (enough achieved).
- 3. Students' activity increase after implementation of Problem-based learning model, it is seen that in cycle I, all groups are passive group with average score 45.80% so that the class is said passive class in learning activity in implementation PBL learning cycle I but in Cycle II, there are improvement in learning activity with average score 86.90%. All the group reach score ≥ 75%, it means that all the group in cycle II are active in learning activity.

## 5.2. Suggestion

Based on these result, the authors propose some suggestion for learning mathematics in problem solving ability that can be given as follow:

1. Learning mathematics by implementation PBL model can be used as an alternative effective learning to increase students' mathematical problem solving ability and students' activity. But for the first implementation teacher fell difficult in preparing learning and condition the class. Because

PBL is firstly giving real problem to the students without explain far explanation of the topic, students are not accostumed in solve problem will fell boring and lazy to learn. It is therefore recommended for the teacher before do learning process, teacher asks students to prepare learning material at home such as reading the topic which will be learned. So in learning students find difficulty, they can face the trouble by sharing with their group to solve the problem.

- 2. Problem-Based Learning Model can develop critical thinking ability of students because it needs high thinking ability of students to understand the problem and for lazy students, it is difficult to do it so the teacher must be more guide and observe each group working so that all group member demand to be active in the group.
- 3. For teacher that the application of problem-based learning model to increase students' mathematical problem solving ability, then the teacher must :
  - a. Able to make problem question which can be used to exercise the students to do problem solving step.
  - b. Management of time as good as possible when learning is done.
  - c. Understanding the phases that must be applied in problem-based learning model.
  - d. Doing small learning groups designed which are heterogeneous.
  - e. Guide and help students to open mind to solve problem.
  - f. Facilitating learning activities as a facilitator by promoting patient, tenacity and always innovative attitudes.
- 4. To increse research result of the research, the fourth step of Polya (looking back) must get extra attention.
- 5. Before enter cycle I, it is needed more accurate data beside teacher data to spread the group.
- 6. To school, by due process of learning by using problem-based learning requires infrastructure to provide the facilities needed to support

improvement of learning in order to improve the quality of learning, in this case an effort to improve students' mathematical problem solving ability.

7. For the next researcher, it is expected to use research result as comparison matter and implement PBL model in other topic, using attractive book and nteresting SAS to make students are more interesting to do learning actively.

