

## CHAPTER V

### CONCLUSIONS AND SUGGESTIONS

#### 5.1. Conclusions

Based on the results of the investigation or research that has been conducted, the level of problem solving ability of students in learning mathematics at SMK Negeri 1 Kisaran can be concluded as follows:

1. The experimental class's level of mathematical problem solving skills is higher than the control class's level of conventional learning when it comes to circular material that is taught utilizing Geogebra application media. With details of the posttest data obtained, it shows that the average value of the problem solving skills of the experimental class is 84.58 with details of 6 students out of 33 students or 218.2% who have high skills, 20 students out of 33 students or 63.6% who have moderate skills and 6 students out of 33 students or 18.2% who have low skills. While the average problem solving skills in the control class is 79.85 with details of 5 students out of 33 students or 15.1% who have high skills, 20 students out of 33 students or 60.6% who have moderate skills and 8 students out of 33 students or 24.3% who have low skills.
2. The result of the N-Gain test for problem solving skills in the experimental class is 76.3% with a high and effective category, while in the control class it is 61.7% with a medium and quite effective category. And There is a significant difference between the mathematical problem solving skills of circle material that gets learning utilizing Geogebra application media within the experimental class higher than the mathematical problem solving skills of conventional learning within the control class. Where  $t\text{-count} > t\text{-table}$  is  $2.056 > 1.999$  or significant level =  $0.015 < \alpha = 0.05$ .

#### 5.2. Suggestions

Based on the results of investigation or research that has been conducted by researchers regarding the level of problem solving skills of students in learning mathematics at SMK Negeri 1 Kisaran, the following suggestions can be made:

### 1. To Researchers

To other researchers who will conduct research on the effect of using GeoGebra, it is recommended to pay attention to technical factors when conducting research so that learning and data collection run optimally. In addition, for other researchers if the implementation of research that wants to use question instruments in this study is advised not to use too many questions that cause students to lack time in working on problems.

### 2. To Teachers

Teachers should use varied and optimal learning strategies for the learning process carried out, especially in mathematics learning. With the existence of variations or optimal strategies, it can make students able to develop problem solving skills and activeness in the learning process. So that the learning process carried out can achieve predetermined goals.

### 3. To Students

Students must be more active in participating in the learning process that takes place in order to improve problem solving skills in working on problems given by teachers, especially in mathematics learning. Learners should also motivate themselves more to like all learning so that they can make the learning process more comfortable and enjoyable.