

CHAPTER V

CONCLUSION AND SUGGESTION

5.1. Conclusion

Based on the result of the research and discussion, the following conclusions for this research as follows

1. The students' mathematical communication ability taught by problem-based learning model assisted by geogebra software is higher than the students' mathematical communication ability taught by conventional model. This is based on hypothesis testing using t-test that has been done. From the hypothesis testing of communication ability, $t_{calculate} > t_{table}$ is obtained, which is $3,846 > 1,671$ then H_o is rejected dan H_a is accepted. The difference indicates that the learning model used can effect significantly on students' mathematical communication ability. In this case, the problem-based learning model assisted by geogebra software has a positive effect on students' mathematical communication ability. This is because the learning process using problem-based learning assisted by geogebra software is carried out with learning in groups and discussions that can improve students' mathematical communication ability. Through learning in groups and discussions, students can communicate their thoughts coherently to their classmates and teachers. In addition, group discussion allows students to express their understanding, express their thinking process in the terms of sentences, and clarify their understanding or incomprehension. Whereas in conventional learning, students are not trained to convey their ideas in the problem-solving process, because the learning process is teacher-centred so that knowledge tends to be transferred from teacher to student without students constructing their

own knowledge and less empowering students in interacting in the classroom.

2. The way the problem-based learning model assisted by geogebra software can affect students' mathematical communication ability is through the problem-based learning Stage. Stages in the problem-based learning model provides an opportunity for students to improve their mathematical communication ability. At the orienting problem stage, the indicators of mathematical communication ability that are encouraged are writing and mathematics expression. At the stage of guiding individual or group investigations, students' writing, drawing, mathematics expression abilities are trained to gather information so that they can solve the problems contained in the LKPD. At the stage of analyzing and evaluating, students' drawing also encourage.

5.2. Suggestion

1. Students

For students, they are directed to prepare themselves before learning, be serious in participating in learning and obey the directions given by the teacher.

2. Teachers

Teachers are directed to use learning models and media that can improve students' mathematical communication ability. The problem-based learning model assisted by geogebra software can be an option of the model that can be used. Using geogebra in the learning process can make learning fun because students are very enthusiastic and interested in solving problems displayed in geogebra, the learning process becomes effective and efficient because geogebra is able to draw geometry displays easily.

3. Researcher

For future researchers, who will use the problem-based learning model assisted by geogebra software, they are expected to have the ability to

use this model so that they can manage the class, students, and time properly.



THE
Character Building
UNIVERSITY