ABSTRACT


This study aims to: (1) determine the level of students’ mathematical problem solving ability after applying the Problem Based Learning at SMP Negeri 5 Sibolga, (2) Describe students’ answer sheets in students’ mathematical solving by applying the problem based learning and (3) Analyzing students’ difficulties in solving mathematical problems by applying the Problem Based Learning model. This study uses descriptive qualitative research which was carried out in the Even Semester of T.A 2020/2021 class VIII-5 At SMP Negeri 5 Sibolga, the instrument used to collect data consisted of four essay test questions. Data analysis techniques that include description data, written test data and interview results, are analyzed from written test results and interview results so that conclusions can be drawn. Based on the results of the analysis of the level of problem solving ability in the application of the Problem Based Learning model, it can improve problem solving skills in the percentage of very good ability that is 22.58%, good ability is 25.80%, ability is quite good 16.12% and ability is not good that is 12.90%. Based on the students’ answers, namely where students with very good and good abilities, most of them were able to write well at each polya stage and were also able to write solutions in calculations in accordance with what was asked of the questions, students with good enough abilities were mostly able to write well. but there are still difficulties in completing calculations made by students and those with poor ability only a small part have written well while students do not write anything at all and are wrong in writing solutions in the form of calculations. The difficulty in being very good at solving problems takes quite a lot of time but being very careful in working on problems, difficulties in good ability when working in a hurry and not being thorough in working on questions, ability is quite good when completing the stages but there was an error during the calculation, and the ability was not good at working on the stages but not perfect, in the planning stage managed to give an idea but it was not quite right so that it was difficult. The four types of difficulty are facts, concepts and skills

Keywords: Mathematical Problems, Problem Solving Ability, Problem Based Learning Model