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Mathematical Reasoning: The characteristics of students mathematical abilities in problem solving

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Abstract

Mathematics and mathematical reasoning are two things that cannot be separated. Understanding mathematics is obtained through reasoning, while reasoning is understood and trained through learning mathematics. Therefore reasoning skills are needed by students when learning mathematics. Students who have the ability to reason during the process of understanding, reasoning during planning problems, reasoning in resolving and reasoning in drawing conclusions will make it easier for them to understand Mathematics. So that mathematical reasoning ability is needed to build a student's mathematical abilities. It can be said that the character of students' mathematical abilities influences students' mathematical reasoning. This study aims to describe students' mathematical abilities in solving mathematical problems by using mathematical reasoning. This study uses a qualitative approach. The subjects of this study were two eighth grade students of junior high school. The results showed that students with high mathematical abilities could be described as having good mathematical reasoning because it had fulfilled four indicators of mathematical reasoning. Whereas for students with low mathematical abilities are still very lacking in the process of reasoning because they cannot fulfill the four indicators of mathematical reasoning. Subjects are only able to understand the problem

Keywords: mathematical reasoning, mathematical problem solving, mathematical ability, eighth grade students, j

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