

Description of Mathematical Reasoning Ability for Students of SMA Negeri 1 Tawang Sari Class XI-MIPA 3 on Matrix Material

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ABSTRACT

The purpose of this study was to determine how the students' mathematical reasoning abilities towards the matrix material. The data in this study were obtained from the results of filling out questionnaires and also interviews. Sources of data in this study were the subjects from which the data were obtained, namely students of class XI-MIPA 3 SMA N 1 Tawang Sari. The data analysis technique used was data reduction, data presentation and conclusion drawing. The results of the data analysis from the questionnaire showed that the average percentage of student responses to mathematical reasoning abilities on the matrix material was 60.75% and was in the medium category. With the percentage on each indicator, namely on indicator 1 (students do calculations with the applicable mathematical formula / rules) of 55.63% so that it is included in the moderate category, students with the moderate category have aspects of the ability to understand question commands and are only weak at calculation operations. In indicator 2 (students draw general conclusions based on mathematical processes / concepts) the percentage is 61.25% so it is included in the medium category. In indicator 3 (students make estimates) the percentage is 81.25% so that it is included in the high category, students with high categories have aspects of the ability to understand question commands, question logic and can complete counting operations. While the percentage on indicator 4 (students draw conclusions based on the similarity of mathematical processes / concepts that are seen) is 54.5% so it is included in the low category, students with low categories have aspects of the question's melogical ability and are only weak in counting operations. The average percentage of the four indicators is 63.16% so that student responses can be said to be in the medium category. In this study, checking the validity of the data used triangulation techniques, namely by comparing the results of the study with the results of interviews. From the comparison of data analysis with questionnaires and interviews, it can be concluded that students with mathematical reasoning on the matrix material are in the medium category.

Keywords: Mathematical reasoning, matrix.