

ABSTRACT

TUTI SETIAWATI. 2021. MASONS THINKING PROCESS ON STUDENTS MISCONCEPTIONS IN SOLVING ALGEBRA PROBLEMS REVIEWING FROM GENDER

This study aims to determine the thinking process according to Mason on the This study aims to determine the thinking process according to Mason on students' misconceptions in solving algebra problems in terms of gender. The research used qualitative-descriptive research methods. Data collection techniques used algebra test questions, unstructured interviews. The research instrument is the researcher as the main instrument and algebraic thinking questions. The research subjects came from two gender groups, class X students of Institutional Accounting and Financial Expertise Competency (AKL) at SMK Negeri Rajapolah, Tasikmalaya Regency. The analysis technique includes data reduction, data presentation, and verification. The results showed that the factor that caused students' misconceptions was the existence of wrong initial concepts (preconceptions). The thinking process according to Mason for male students who experience misconceptions in solving algebraic problems only reaches the attack stage, precisely in the maybe aspect. At this stage SL5 did not finish working on the questions so that SL5's thought process according to Mason was incomplete. SL5 experienced a misconception at the attack stage, precisely in the maybe aspect, SL5 put forward a conjecture, namely by making comparisons from sides that were known but wrong. The thinking process according to Mason for female students who experience misconceptions in solving algebraic problems through all stages of the thinking process, but experience misconceptions at the review stage, precisely the check aspect. SP7 did not check the accuracy of the calculations, this can be seen from SP7's wrong answers but he was not aware of it.

Keywords: *thinking process, students' misconceptions, algebraic problems, gender*