

ANALYSIS OF MATHEMATICAL PROOF ABILITY IN NUMBER PROBLEMS AMONG MATHEMATICS TEACHER CANDIDATES

This research aims to explore the proof abilities of prospective mathematics teacher students in number problems based on their proof methods. This research is necessary because reasoning skills in proof are an important competency that future mathematics teacher candidates must possess. This type of research is a combination of quantitative and qualitative methods with a case study approach, which aims to understand the phenomenon of what the research subjects experience in a holistic and natural manner. The research results provide an overview of the reasoning used by students in proving number problems. The identified errors are as follows: (1) In proofs using mathematical induction, there are incorrect algebraic manipulations and reasoning errors involving natural numbers, (2) In direct proofs, there is faulty reasoning, (3) In proofs by contradiction, there are incorrect reasoning and assumptions, (4) Proving by providing specific examples.

Primary authors: JIVANI DASUSMI, Krisna (University of Mataram); HUMAIRA SALSABILA, Nilza (University of Mataram); SUBARINAH, Sri (University of Mataram); PRAYITNO, Sudi (University of Mataram); WAHYU TRIUTAMI, Tabita (University of Mataram)

Presenter: SUBARINAH, Sri (University of Mataram)

Session Classification: Parallel Session

Track Classification: Teaching & Learning