

## SARI

**Ferdiyanto, Antok. 2021.** Analisis Kesalahan Siswa Dalam Menyelesaikan Masalah Trigonometri Berdasar Prosedur Newman Ditinjau Dari Perspektif Gender. Program Studi Pendidikan Matematika, Universitas Islam Sultan Agung, Pembimbing I : Dr. Imam Kusmaryono, M.Pd., Pembimbing II: Dr. Hevy Risqi Maharani, M.Pd.,

**Kata Kunci:** Newman, Trigonometri, Gender.

Tujuan dalam penelitian ini adalah guna mengetahui persentase tingkat kesalahan siswa di tiap kriteria Newman ditinjau dari perspektif gender dan menemukan faktor-faktor yang menjadi penyebab kesalahan siswa dalam menyelesaikan soal perbandingan trigonometri pada segitiga siku-siku pada prosedur Newman ditinjau dari perspektif gender. Pentingnya analisis kesalahan agar siswa dapat mengerti letak kesalahannya dan diharapkan siswa lebih teliti dalam penyelesaian permasalahan matematis.

Instrumen yang digunakan berupa tes uraian dan wawancara serta lembar observasi guna memvalidasi hasil tes uraian ketika wawancara berlangsung. Instrumen tes uraian berupa soal nilai perbandingan sudut trigonometri pada segitiga siku-siku. Analisis jawaban soal tes menggunakan prosedur Newman dengan memperhatikan kelima langkahnya yang terdiri dari kesalahan membaca, kesalahan memahami, kesalahan transformasi, kesalahan keterampilan prosedur, kesalahan penulisan jawaban. Wawancara dilakukan untuk mengetahui letak kesalahan dan apakah subjek melakukan kesalahan pada setiap langkah prosedur Newman. Metode penelitian yang digunakan ialah pendekatan deskriptif-kualitatif

Berdasarkan hasil analisis serta pembahasan, ditinjau berdasar prosedur Newman dan perspektif gender didapatkan kesimpulan bahwa dari 28 siswa kelas XI MIPA VI sebanyak 5 orang siswa laki-laki paling sering melakukan kesalahan pada kriteria kesalahan memahami, sedangkan sebanyak 5 orang siswa perempuan paling sering melakukan kesalahan pada kriteria kesalahan penulisan jawaban. Kesalahan laki-laki disebabkan karena terburu-buru dalam membaca soal sehingga ceroboh dalam pengerjaannya sedangkan kesalahan perempuan disebabkan kurang teliti yang menyebabkan penulisan hasil kurang kurang disederhanakan. Dengan berpedoman pada prosedur Newman yaitu kesalahan membaca, kesalahan memahami, kesalahan transformasi, kesalahan keterampilan prosedur, dan kesalahan penulisan jawaban.

## ABSTRACT

**Ferdiyanto, Antok. 2021.** Analysis of Student Errors in Solving Trigonometry Problems Based on the Newman Procedure Viewed from a Gender Perspective. Mathematics Education Study Program, Sultan Agung Islamic University, Advisor I : Dr. Imam Kusmaryono, M.Pd., Advisor II: Dr. Hevy Risqi Maharani, M.Pd.,

**Keyword:** Newman, Trigonometri, Gender.

The purpose of this study is to determine the percentage of student error rates in each of Newman's criteria in terms of gender perspective and find the factors that cause student errors in solving trigonometric comparison problems in right triangle. Error analysis is important to help students understand the location of the error and they are expected to be more thorough in solving mathematical problems.

The instruments used were in the form of description tests and interviews as well as observation sheets to validate the results of the description tests when the interview took place. The instrument of description test is in the form of a comparison of trigonometric angles in a right triangle. Test answer is analyzed using the Newman procedure by paying attention to the five steps consisting of reading errors, understanding errors, transformation errors, procedural skills errors, writing answers errors. Interviews were conducted to find out where the error was and whether the subject made a mistake on each step of the Newman procedure. The research method used is a descriptive-qualitative approach

Based on the results of the analysis and discussion that is reviewed through the Newman procedure and Gender perspective, it was concluded that out of 28 students in class XI MIPA VI, 5 male students most often made mistakes on the criteria for misunderstanding, while 5 female students most often made mistakes on the criteria for writing errors in answers. Men's mistakes are caused by being in a hurry in reading the questions so they are careless in the process, while women's mistakes are caused by lack of accuracy which causes the writing of the results not simplified. By referring to the Newman procedure, namely reading errors, understanding errors, transformation errors, procedural skills errors, and writing answers errors.