

ABSTRAK

Agustina Dhevin Merinda Damayanti, 2017. Analisis Kesalahan Siswa dalam Menyelesaikan Soal Limit Fungsi Aljabar dan Upaya Remediasinya Di Kelas XI IPS SMA Seminari Mertoyudan Tahun Ajaran 2016/2017. Skripsi. Program Studi Pendidikan Matematika, Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma Yogyakarta.

Penelitian ini bertujuan untuk mengetahui jenis-jenis kesalahan yang dilakukan siswa dan faktor-faktor penyebab siswa kelas XI IPS SMA Seminari Mertoyudan dalam menyelesaikan soal pada materi Limit Fungsi Aljabar. Disamping itu penelitian ini juga bertujuan untuk mengetahui pengaruh pembelajaran remedial dalam mengatasi kesalahan dalam menyelesaikan soal pada materi Limit Fungsi Aljabar.

Subyek penelitian ini adalah siswa kelas XI IPS SMA Seminari Mertoyudan tahun ajaran 2016/2017 yang berjumlah 31 siswa. Metode penelitian yang digunakan adalah deskriptif kualitatif. Data yang dikumpulkan melalui observasi, tes diagnostik, wawancara, dan tes remedial.

Hasil penelitian menunjukkan bahwa (1) kesalahan-kesalahan yang dilakukan siswa antara lain: kesalahan data dalam mengabaikan data penting yang sudah ada dan menggantinya dengan data yang tidak relevan, menggunakan syarat yang tidak sesuai dengan informasi yang diberikan; kesalahan menginterpretasikan data; kesalahan memahami definisi; kesalahan teknis antara lain kesalahan-kesalahan dalam perhitungan, menghilangkan notasi limit, menambahkan notasi limit; kesalahan dalam pembagian bilangan nol; kesalahan dalam penggunaan tanda kurung; kesalahan dalam mendistribusikan; kesalahan dalam mengerjakan soal dengan menghilangkan/ menghapuskan variabel, koefisien, atau konstanta; kesalahan menggunakan logika dalam penarikan kesimpulan; kesalahan konsep. (2) faktor-faktor penyebab siswa melakukan kesalahan antara lain: belum menguasai materi prasyarat; kurang teliti; kurang memahami definisi; belum memahami konsep dasar; takut dan ragu dalam menyelesaikan soal; bingung dengan cara yang akan digunakan untuk menyelesaikan soal; memiliki sugesti negative terhadap pelajaran matematika; dan waktu yang diberikan kurang. (3) kesalahan siswa dalam menyelesaikan soal limit fungsi aljabar berkurang setelah diadakan remedial dan ada peningkatan hasil belajar siswa.

Kata Kunci : Analisis, Kesalahan, Analisis Kesalahan, Limit Fungsi Aljabar, Upaya Remediasi

ABSTRACT

Agustina Devin Merinda Damayanti, 2017. The Students' Mistakes Analysis of Working on Questions about Limit of Algebraic Function and The Remedial Efforts In Grade XI Social Science Seminari Mertoyudan Senior High School in The Academic Year 2016/2017. Thesis, Mathematics Education Study Program, Department of Mathematics and Science, Faculty of Teachers Training and Education, Sanata Dharma University, Yogyakarta.

This research aimed to find out types of mistakes that were done by the students and cause factors of the students grade XI social science in Seminari Mertoyudan in working on questions about Limit of Algebraic Function. Besides, this research also aimed to find out the influences of a remedial learning in solving the mistakes while working on questions about Algebra of Limits Functions.

The research subjects are the students grade XI social science in Seminari Mertoyudan Senior High School, in the academic year 2016/2017 which consist 31 students. The research method applied was qualitative descriptive research. The data were collected through interview diagnostic observation test and remedial test.

The research results showed that (1) the mistakes were done by the students, i.e. the data mistakes in ignoring the important data and changing with the data that were not relevant, applying the requirements which were not suitable to the information given; the mistakes in interpreting the data; the mistakes in comprehending the definition; the technical mistakes, i.e. the mistakes in counting, eliminating the limit notation, adding the limit notation, the mistakes in zero number of division; the mistakes in applying the brackets; the mistakes in distributing; the mistakes in working on the questions because eliminating/deleting variables, coefficients, or constants; the mistakes in applying the logic in making the conclusion; the mistakes in concept. (2) the cause factors of the students making the mistakes, i.e. they hadn't comprehended pre-requirement materials; were less of concern; did not comprehend the definition; hadn't comprehended the basic concept; were afraid of working on the questions; were confused with the procedures which would be applied to work on the questions; had negative feeling in mathematics lesson; and were less of the time. (3) the students' mistakes in working on the questions about algebra of the limits functions were reduced after the remedial implementation and there were improvement in students learning results.

Key Words : ***Analysis, Mistake, Analysis of The Mistake, Algebra of Limits Functions, Remedial Efforts***