

ABSTRAK

Masih jarang penelitian miskonsepsi yang telah dilakukan pada bidang matematika, salah satunya oleh Almog dan Ilany (2012) yang meneliti miskonsepsi siswa pada topik pertidaksamaan nilai mutlak. Topik pertidaksamaan merupakan topik yang sulit bagi siswa. Diduga bahwa kesulitan siswa pada topik pertidaksamaan bermula saat pertidaksamaan pertama kali dipelajari siswa. Di Indonesia, PTL SV (Pertidaksamaan Linear Satu Variabel) merupakan bagian dari topik pertidaksamaan yang pertama kali dipelajari oleh siswa, yakni pada kelas VII SMP (Sekolah Menengah Pertama). Karenanya, penelitian ini menyelidiki miskonsepsi siswa pada topik PTL SV. Tes tertulis diberikan kepada 58 siswa kelas VIII SMP. Dari 58 siswa tersebut, 16 diantaranya diwawancarai berdasar hasil tes tertulis mereka. Guna mencari kemungkinan penyebab kesalahan siswa dan miskonsepsi siswa, dilakukan wawancara terhadap guru, analisis buku paket, analisis RPP (Rencana Pelaksanaan Pembelajaran) dan analisis kurikulum. Berdasar tes tertulis, ditemukan sepuluh kesalahan siswa dalam menyelesaikan soal topik PTL SV. Sedangkan berdasar wawancara, ditemukan empat miskonsepsi siswa pada topik PTL SV. Berdasarkan wawancara terhadap guru, analisis buku paket, analisis RPP (Rencana Pelaksanaan Pembelajaran) dan analisis kurikulum, ditemukan lima kemungkinan penyebab kesalahan dan miskonsepsi siswa pada topik PTL SV. Ditemukan pula keterkaitan antara kesalahan siswa, miskonsepsi siswa dan kemungkinan penyebabnya. Peneliti juga meyrankan beberapa hal untuk pembelajran topik PTL SV berdasar kesalahan siswa, miskonsepsi siswa dan kemungkinan penyebabnya.

Kata kunci: Miskonsepsi pada Aljabar, Pertidaksamaan, Pertidaksamaan Linear Satu Variabel, Kesalahan Siswa

ABSTRACT

Misconceptions research in mathematics which have been carried out are rare, one of them is a study that is conducted by Almog and Ilany (2012) which investigates students' misconceptions on absolute value inequality. Inequality is a difficult subject for students. Therefore, we conjecture that many difficulties on inequality begin when the first time inequality is studied. In Indonesia, linear inequality in one variable is the first inequality that is studied by junior high school students, i.e. in seventh grade. Because of that, this research investigates students' misconceptions in linear inequality in one variable. Written test was given to fifty-eight of eighth grade students, sixteen of them were interviewed. In order to find possible causes of errors and misconceptions, the interview was conducted to teachers, analysis of textbooks, analysis of lesson plan and analysis of curriculum. The written test results showed that there were ten errors that the students made in solving linear inequality in one variable problems. The interview results showed that there were four misconceptions that the students have in linear inequality in one variable topic. Based on the interview was conducted to teachers, analysis of textbooks, analysis of lesson plan and analysis of curriculum, it was found that there were five possible causes of student's errors and student's misconceptions on linear inequality in one variable. We found correlation between the students' errors, the students' misconceptions and the possible causes. Based on the students' errors, the students' misconceptions and the possible causes, we suggest several things for learning process on linear inequality in one variable.

Keywords: Misconceptions, Inequality, Linear Inequality in One Variable, Students' Errors