

ABSTRAK

KF. Sunny Cahya Utama. 2015. *Analisis Kesulitan Siswa Kelas X.1 SMA Pangudi Luhur Yogyakarta Tahun Ajaran 2014/2015 dalam Mengerjakan Soal-soal Trigonometri dan Upaya Perbaikannya*. Skripsi. Yogyakarta: Pendidikan Matematika, Jurusan Pendidikan Matematika dan IPA, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma.

Penelitian ini bertujuan untuk mendeskripsikan kesulitan-kesulitan, memaparkan faktor-faktor kesulitan, dan memberikan upaya mengatasi kesulitan siswa kelas X.1 SMA Pangudi Luhur Yogyakarta tahun ajaran 2014/2015 dalam mengerjakan soal-soal materi trigonometri.

Jenis penelitian ini yaitu deskriptif kualitatif. Penelitian ini dilaksanakan pada bulan Februari-Juni 2015. Subjek penelitian ini adalah siswa kelas X.1 SMA Pangudi Luhur Yogyakarta tahun ajaran 2014/2015 yang berjumlah 33 siswa. Objek penelitian ini yaitu kesulitan subjek penelitian dalam mengerjakan soal-soal trigonometri. Metode pengumpulan data yang dilakukan pada penelitian ini yaitu observasi pembelajaran, pengisian kuesioner, tes diagnostik, wawancara, pengajaran remedial, dan tes remedial. Metode analisis data tes diagnostik dan tes remedial yaitu dengan mengelompokkan jenis kesalahan berdasarkan teori Hadar dan teman-teman serta menghitung tingkat kesulitan setiap indikator. Metode analisis data kuesioner menggunakan skala Likert.

Hasil penelitian menunjukkan subjek penelitian mengalami kesulitan mengerjakan soal-soal trigonometri. Berdasarkan tes diagnostik, wawancara, dan tes remedial, kesulitan-kesulitan tersebut yaitu menentukan definisi yang dipakai pada saat mengerjakan soal trigonometri (perbandingan trigonometri, letak suatu kuadran, letak tanda positif dan negatif dari perbandingan trigonometri, menentukan nilai dari sudut istimewa di semua kuadran, serta mengubah identitas trigonometri dengan benar), mengerjakan soal dengan teknis yang salah (tidak teliti dalam perhitungan, salah menggunakan lambang matematika, salah penggunaan teorema Pythagoras, merasionalkan bentuk pecahan, dan menghitung dalam bentuk perkalian dan pembagian pecahan), dan menafsirkan data dari soal ke perhitungan matematis. Berdasarkan kuesioner dan wawancara, faktor yang memengaruhi subjek penelitian yaitu intern siswa (motivasi yang kurang, mudah menyerah, dan kurang dapat mengendalikan diri), guru (kurang tegas dan kurang memberikan latihan soal), lingkungan sekolah, keluarga (kurang kontrol orang tua), dan lingkungan luar sekolah. Upaya perbaikan dilakukan dengan pengajaran remedial dan tes remedial. Pengajaran remedi dilakukan dengan mengulang kembali penjelasan yang berkaitan dengan materi dan memberikan latihan soal yang cukup. Hasil dari tes remedial, 12,12 % siswa mencapai KKM, rata-rata hasil belajar meningkat dari 37,39 menjadi 46,96, dan kualitas pengerjaan soal-soal trigonometri yang membaik.

Kata kunci: Kesulitan mengerjakan, trigonometri, Remediasi

ABSTRACT

KF. Sunny Cahya Utama. 2015. Analyze the difficulties of the students X.1 of Pangudi Luhur senior high school Yogyakarta in academic year 2014/2015 in discussing trigonometry problem in how to improve them. Thesis. Yogyakarta: Mathematics Education, Department of Mathematics and Science Education, Faculty Teacher Training and Education, Sanata Dharma University.

The objective of the research is to describe the difficulties, to explain the factors, and to give the trouble solution at the students X.1 of Pangudi Luhur senior high school Yogyakarta in academic year 2014/2015 in discussing trigonometry.

This type of research is qualitative descriptive. The research was conducted in February to June 2015. The subject of the research is class X.1 of Pangudi Luhur Yogyakarta in academic year 2014/2015 amounting to 33 students. Object of the research is the difficulty in doing research subject matter trigonometry. Method of data collection conducted in this study was observasional learning, filling out the questionnaire, diagnostic test, interview, remedial teaching, and remedial test. Analytical methods of diagnostic test and remedial test is to classify the type of error based on the theory of Hadar and friends as well as calculate the degree of difficulty of each indicator. Analytical methods of questionnaire is using a Likert scale.

The results showed the research subject trouble doing trigonometry question. Based on diagnostic test and interview, the difficulties is determining definition which are used at work on the problems of trigonometry (comparison of trigonometry, the location of a quadrant, where the positive and negative signs of comparison trigonometry, determine the value of a special corner in all quadrants, as well as change the trigonometric identities correctly), work on the problems with incorrect (not accurate in the calculation, one uses the symbol of mathematics, incorrect use of the Pythagorean theorem, rationalizing the form of fractions, and counting in the form of multiplication and division of fractions), and interpretirsof mattersin tho mathematical calculation. Based on questionaries and interview, factors the affect the subject of studies are internal students (motivation is lacking, it is easy to give up, and less able to control myself), teacher (less assertive and less give exercises), school off an enviroment, family (lack of parental control), and outside the school environment. Efforts to repair done by remedial teaching and remedial test. Remedial teaching is done by repeated explanations relating to the matter and provide sufficient exercises. Results of tests remedial, 12.12% of students reached KKM, the average learning outcomes increase of 37.39 into 46.96, quality workmanship trigonometry problems improved.

Keywords: Difficulties, trigonometry, Remediation