

**KONSEPSI SISWA SMA PADA MATERI PERBANDINGAN  
TRIGONOMETRI BERDASARKAN TEORI APOS**

SKRIPSI

Diajukan untuk memenuhi sebagian syarat untuk memperoleh  
gelar Sarjana Pendidikan Matematika



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## ABSTRAK

### **Anisa Safitri (1605003). Konsepsi Siswa SMA Pada Materi Perbandingan Trigonometri Berdasarkan Teori APOS.**

Konsepsi adalah salah satu unsur dalam konsep yang merupakan usaha seseorang untuk memahami suatu konsep melalui membaca atau mendengarkan penjelasan yang diberikan. Salah satu teori yang dapat digunakan untuk melihat proses konsepsi siswa dalam memahami konsep matematika tertentu adalah Teori APOS (Action-Process-Object-Schema) yang diperkenalkan oleh Dubinsky pada tahun 1991 yang menguraikan tentang bagaimana kegiatan mental seorang anak yang berbentuk *action-process-object-schem* ketika mengkonstruksi konsep matematika. Penelitian ini dilakukan untuk mendeskripsikan konsepsi siswa pada materi perbandingan trigonometri dengan menggunakan teori APOS. Metode penelitian yang digunakan dalam penelitian ini adalah penelitian kualitatif dengan pendekatan studi kasus. Instrumen yang digunakan berupa tes esai yang disusun menggunakan indikator berdasarkan teori APOS dan wawancara. Penelitian ini menggunakan data dari 22 responden siswa SMA yang berasal dari 3 sekolah yang berbeda. Hasil penelitian ini menunjukkan bahwa konsepsi siswa SMA pada materi perbandingan trigonometri cenderung berada pada tahap *process* dengan persentase sebesar 86.8% dari keseluruhan responden. Berdasarkan kategori kemampuan siswa yaitu Tinggi, Sedang dan Rendah dapat disimpulkan bahwa siswa dengan kategori kemampuan yang sama dari sekolah yang berbeda jika diberikan soal yang sama memiliki kriteria hasil tes yang berbeda dan memiliki tingkat konsepsi berdasarkan teori APOS yang juga berbeda.

**Kata kunci :** Konsepsi, Perbandingan Trigonometri, Teori APOS

## ABSTRACT

### **Anisa Safitri (1605003). Senior High School Student's Conception of Trigonometric Comparison Material Based on APOS Theory.**

Conception is one of the elements in the concept which is a person's effort to understand a concept through reading or listening to the explanation given. One of theory that can be used to identify student's conceptions is APOS (Action Process Object Schema) Theory introduced by Dubinsky in 1991 that describes how a student's mental activities are in the form of actions, processes, objects, and schemas when constructing mathematical concepts. This study was conducted to describe student's conceptions of trigonometric comparison material using the APOS theory. The method of research used in this research is qualitative research with a case study approach. The instruments used are interviews and an essay test which is compiled using indicators based on APOS theory. This study uses data from 22 respondents of 3 different senior high school. The results of this study indicate that the conception of high school students on trigonometric comparison material tends to be in the process stage with a percentage of 83.8% of all respondents. Based on the ability categories of students, namely High, Medium and Low, it can be concluded that students with the same category from different schools if given the same questions have different test results criteria and have different levels of conceptions based on APOS theory.

**Keywords:** Conception, Trigonometric Comparison, APOS Theory

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