

## ABSTRAK

Skripsi ini membahas mengenai hasil kali geometri dan sifat-sifat hasil kali geometri antar vektor. Hasil kali geometri merupakan penjumlahan dari hasil kali dalam dan hasil kali luar. Hasil kali geometri memenuhi sifat asosiatif, distributif kiri maupun distributif kanan, serta kebebasan posisi terhadap perkalian dengan skalar. Secara umum, hasil kali geometri tidak memenuhi sifat komutatif maupun antikomutatif. Sifat komutatif hanya dipenuhi ketika dua buah vektor sejajar; dan sifat antikomutatif dipenuhi jika dua buah vektor saling tegak lurus.

**Kata kunci:** antikomutatif, asosiatif, distributif, hasil kali geometri, vektor

## ABSTRACT

*This research discusses geometric product and the properties of the geometric product between vectors. This product is the sum of the inner product and the outer product. The geometric product satisfies some properties: associative, left distributive and right distributive, as well as positional freedom of multiplication by scalar. In general, geometric products have neither commutative nor anticommutative properties. The commutative property is only satisfied when the two vectors are parallel; and the anticommutative property is satisfied if the two vectors are perpendicular.*

**Keywords:** *anticommutative, associative, distributive, geometric product, vector*