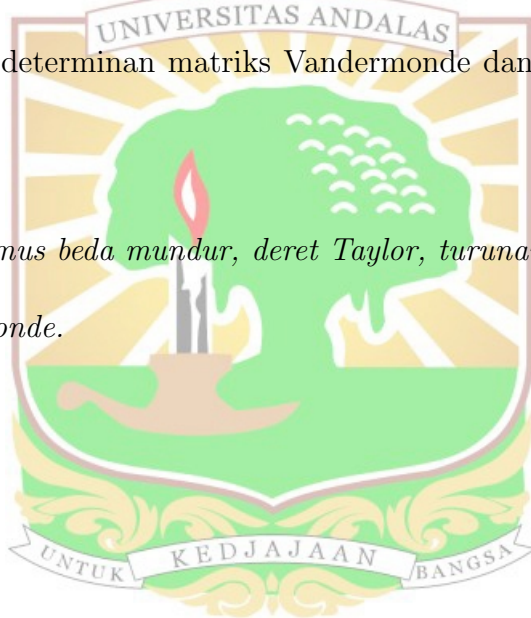


ABSTRAK

Penelitian ini, membahas cara menentukan rumus eksplisit beda mundur berdasarkan deret Taylor untuk menghampiri turunan ke-2 dengan Orde ketelitian ke- N dari fungsi satu variabel. Dalam menentukan rumus eksplisit tersebut dibutuhkan sifat-sifat determinan matriks Vandermonde dan beberapa manipulasi aljabar.

Kata kunci: *Rumus beda mundur, deret Taylor, turunan numerik dan matriks Vandermonde.*



ABSTRACT

In this research, we will discuss how to determine an explicit formula for backward difference based on the Taylor series to approach the 2-th derivative with the N -th order of a single variable function. In determining the explicit formula, it takes the determinant properties of the Vandermonde matrix and some algebraic manipulations.

Keywords: *Forward difference formulas, Taylor Series, numerical differentiation, Vandermonde's determinant.*

