Abstract

Equilibrium temperature distribution can be visualized by using curves that connect points with the same temperature. One method used to help analyze the temperature distribution is the numerical method. The Numerical Method is a method for solving mathematical problems by using a set of simple arithmetic operations and logical operations on a set of numbers or numerical data provided. The method used for this research is the Numerical method, namely the Numerical method not only reduces the minimum textit error, but the flexibility of the Numerical method is important for analyzing cases where this method determines the best Accuracy. The results of the comparison of values between the Monte Carlo method of numerical methods. The number of repetitions is inversely proportional to the average value of textit error, the greater the number of repetitions, the smaller the value generated in the experiment textit error. sampling is 100 times from 10 repetitions to 1000 repetitions and the average error falls from 12.1524 to 9.6072 while in the case trial fields outside the 20x20 matrix have been proven by increasing the number of loop samples by 100 times from 10 repetitions to 1000 loops and get an average value of textit error increasing by 10 times from 711.4134 to 71.0777.

Keywords: Distribusi Temperatur, Monte Carlo,Regresi Linier,Random walk.