

Abstract

The purpose of the research is to study the analytic methods for solving the

.differential equation of Riemann- Liouville of fractional order

-The basic functions of this object are Gamma function, Beta function and Mittag

Leffler function. The definition of Riemann- Liouville differintegral with

properties and Laplace Transform of the Riemann- Liouville derivative had

.considered

We found the analytic solution for differential equation of Riemann- Liouville

fractional order by two methods. The first method called the inverse operator

method and the second method is called the Laplace Transform Method. The

.illustrated examples are given for each case