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SOLVING TRANSPORTATION PROBLEMS WITH MIXED CONSTRAINTS IN ROUGH ENVIRONMENT

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Abstract

A new method namely, rough slice-sum method for solving fully rough integer interval transportation problems is proposed. The solution obtained by the proposed method provides a plan having minimum unit shipping rough cost for the given problem. The values of decision rough variables and rough objective function for the given problem obtained by the rough slice-sum method are rough integer intervals. Numerical example is presented to understand the solution procedure of the proposed method.

AMS Subject Classification: 90B06, 90C08.

Key Words and Phrases: Transportation problem, Rough integer intervals, Unit shipping cost, Rough slice-sum method.

1 Introduction

Transportation problem is one of the popular and most important applications of the linear programming problem. Many efficient algorithms [3, 5] have been developed for solving transportation problems having deterministic parameters. In many real life situations, some or all parameters of the transportation problem are

Solving Transportation Problem With Mixed Constraints

Marc Roubens,Association of European Operational Research Societies

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