

ABSTRACT

SOLVING TRANSPORTATION FUZZY PROBLEM USING MAX-MIN METHOD WITH TRAPEZOIDAL FUZZY NUMBERS

by

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The transportation problem is a special kind of linear programming that deals with distribution of goods from source to destination. The goal is to determine a distribution plan to minimize the total distribution costs so that supply and demand limits are met. In this final project an initial feasible solution to the balanced and unbalanced fuzzy transportation problem will be discussed using Max-Min Method where fuzzy numbers are represented by trapezoidal fuzzy numbers. The solution steps in this method are converting the trapezoidal fuzzy numbers to crisp using range technique, finding the penalty value for each row and column, and allocating the cells. The result obtained will be in the form of an initial feasible solution which will be checked for optimality using Stepping Stone Method.

Keywords: Transportation Problem, Max-Min Method, Trapezoidal Fuzzy Numbers, Range technique.