

SOLVING TRIANGULAR FUZZY NUMBER LINEAR PROGRAMMING PROBLEM WITH A NEW RANKING FUNCTION

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Abstract

Fuzzy Linear programming problem is an application of fuzzy set theory in linear decision making problems and most of these problems are related to linear programming with fuzzy coefficients and fuzzy variables. Linear programming problem with triangular fuzzy variables have recently attracted some interest. Some methods have been developed for solving these problems by introducing and solving certain auxiliary problems. Here we apply a simple, new and well defined linear ranking function to order triangular fuzzy numbers. Then we establish the dual problem of the linear programming problem with triangular fuzzy variable and hence some duality results.

Key Words : *Fuzzy linear programming problem, Ranking function, Simplex, Dual Simplex, Triangular fuzzy number.*

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