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A NEW METHOD FOR SOLVING FULLY FUZZY LPP USING LCP APPROACH WITH THE SPECIAL TYPE OF TRAPEZOIDAL FUZZY NUMBERS

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Abstract

In this paper a Lemke's Method is proposed for solving the Fully Fuzzy Linear Programming Problem (FLPP) using Linear Complementarity approach. In FLPP the cost coefficients, constraint coefficients and the right hand side coefficients are represented by trapezoidal fuzzy numbers. If, the given Fuzzy Linear Programming Problem is maximization problem, then convert into minimization problem. And the minimization problem is transformed into the Dual Fuzzy Linear Programming Problem. Hence the Dual FLPP is converted into the Fuzzy Linear Complementarity Problem(FLCP). Then we solve the Fuzzy Linear Complementarity Problem with trapezoidal fuzzy numbers. The effectiveness of the proposed algorithm is illustrated by means of a numerical example.

Key Words : *Fuzzy Linear Programming Problem, Fuzzy Linear Complementarity Problem, Trapezoidal Fuzzy Numbers, Lemke's Method.*

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