



SOME CONJUGATE MAPPING'S PROPERTIES OF CONVEX FUZZY VALUE FUNCTION

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Abstract

We discuss some new conjugate mapping's properties of convex fuzzy value function, show the equality relations of the conjugate mapping between two convex fuzzy value functions and their infimal convolution. Furthermore, we prove that the conjugate mapping of quadratic positively homogeneous convex fuzzy value function is the quadratic positively homogeneous anti-convex fuzzy value function. Finally, these results lay a good foundation for the theory of conjugate duality in fuzzy programming.

Keywords and phrases: convex fuzzy value function, conjugate mapping, infimal convolution, positively homogeneous fuzzy value function.

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