

Ranking Fuzzy Numbers Using a Satellite Town Scheme and a Distance Method

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ABSTRACT

Around seven mega cities saw the introduction of the Development Scheme for Satellite Towns for Urban Infrastructure. In a fuzzy environment, ranking fuzzy numbers is a crucial part of decision-making. Numerous authors have put out numerous suggestions for different ways to rank fuzzy numbers since their creation in 1965. However, there isn't a solution that works well in every circumstance. The majority of the approaches put forth thus far are non-discriminatory and illogical. This study suggests a fresh approach to ranking fuzzy numbers based on the satellite town scheme, which symbolizes the decision-maker's objectivity. This approach rates different varieties of fuzzy numbers, such as regular, generalized trapezoidal, and triangular fuzzy numbers, as well as crisp numbers, with the specificity that crisp numbers should be regarded as particular instances of fuzzy numbers.

Keywords: Rank Fuzzy Quantities, Trapezoidal Fuzzy Number, Crisp Numbers

