

## A NEW METHOD FOR SOLVING DODECAGONAL FUZZY ASSIGNMENT PROBLEM

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**Abstract:** Assignment problem is a special case of linear programming problem. The objective of the optimal assignment is to minimize the total cost or maximize the profit. Fuzzy set theory has been applied in many fields of science, Engineering and Management. In this paper a new ranking method is proposed for solving the dodecagonal fuzzy assignment problem. Fuzzy assignment problem transformed into crisp assignment problem and solved by Hungarian method. A numerical example is presented and the optimal solution is derived by using proposed method.

**Keywords and Phrases:** Dodecagonal Fuzzy number, Ranking Method, Fuzzy Assignment Problem.

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### 1. Introduction

Assignment problem is the special case of linear programming problem. Assignment problem can be applied in all fields like Science, Engineering, and Management etc. Assignment problem plays an important role in industry and other applications. In assignment problem “ n ” jobs are assigned “ n ” persons depending