FUZZY PRE γ-CONTINUOUS AND ALMOST PRE γ-CONTINUOUS FUNCTIONS

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Abstract. In this paper we first introduce a new type of fuzzy open-like set, viz., fuzzy pre-γ-open set, the collection of which is strictly larger than that of fuzzy open set. Afterwards, two new types of fuzzy continuous-like functions, viz., fuzzy pre-γ-continuous and fuzzy almost pre-γ-continuous functions are introduced and studied. It is shown that fuzzy almost pre-γ-continuous function is fuzzy pre-γ-continuous and the converse is true only in fuzzy pre-γ-regular space.

1. Introduction

In [12], L.A. Zadeh introduced fuzzy set. Afterwards many mathematicians have engaged themselves to introduce different types of fuzzy sets. In this context we have to mention [4, 5]. In [3], fuzzy γ-open set is introduced and studied. Taking this definition as a basic tool, here we introduce fuzzy pre-γ-open set which lies in between fuzzy open and fuzzy preopen set [9]. Also it is shown that fuzzy almost pre-γ-continuous function is fuzzy almost continuous [8] but not conversely.

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