A NOTE ON CAUCHY–TYPE CLASS OF FUNCTIONS

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Abstract. In the paper of Jachymski et al., a general Cauchy-type class of functions, $\mathscr{A}_M(X,Y)$, has been defined. Assuming M to be non-decreasing, the class is in some sense equivalent to the class of continuous functions or Baire-1 functions. In this paper, we provide an equivalent definition of the class and use it to obtain several results without assuming M to be non-decreasing. In particular, by assuming the limit of M at $(0,0)$ exists, we show that the class contains all continuous functions or it can only contain uniformly locally constant functions.

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