EQUIDIFFERENTIABILITY OF SUBSETS OF INFINITELY DIFFERENTIABLE FUNCTION SPACES

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Dedicated to Wataru Takahashi on the occasion of his retirement

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Abstract. In this paper, the concept of equidifferentiability, which is analogous to the concept of equicontinuity, is introduced and this concept is applied to some relations between the sets consisting of finitely equidifferentiable functions defined on $[0, 1]$ and the sets consisting of infinitely equidifferentiable functions defined on $[0, 1]$. Moreover, fixed point theorems for the finitely differentiable function spaces and those for the infinitely differentiable function spaces are remarked.
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