GENERALIZATION OF A TWO-DIMENSIONAL HARDY TYPE INEQUALITY FOR PSEUDO-INTEGRALS

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Abstract. In this paper, a new two-dimensional Hardy type inequality is given in two classes of pseudo-analysis. The first one is given for a pseudo-integrals where pseudo-addition and pseudo-multiplication are constructed by a monotone continuous function $g : [0, \infty] \to [0, \infty]$. Another one is given by the semiring $([0, 1], \max, \odot)$ where pseudo-multiplication is generated by an increasing continuous function.