

ON SOME HADAMARD-TYPE INEQUALITIES FOR h -CONVEX FUNCTIONS

MEHMET ZEKI SARIKAYA, AZIZ SAGLAM AND HÜSEYİN YILDIRIM

Abstract. In this paper, some inequalities Hadamard-type for h -convex functions are given. We also proved some Hadamard-type inequalities for products of two h -convex functions.

Mathematics subject classification (2000): 26D07, 26D15.

Key words and phrases: Hadamard's inequality, Convex function, s -convex function, h -convex function.

REFERENCES

- [1] W. W. BRECKNER, *Stetigkeitsaussagen für eine Klasse verallgemeinerter konvexer funktionen in topologischen linearen Raumen*, Publ. Inst. Math., **23** (1978), 13–20.
- [2] W. W. BRECKNER, *Continuity of generalized convex and generalized concave set-valued functions*, Rev Anal. Numér. Thkor. Approx., **22** (1993), 39–51.
- [3] S. S. DRAGOMIR, J. PECARIC AND L. E. PERSSON, *Some inequalities of Hadamard type*, Soochow J. Math., **21** (1995), 335–241.
- [4] S. S. DRAGOMIR AND S. FITZPATRIK, *The Hadamard's inequality for s -convex functions in the second sense*, Demonstration Math., **32** (4) (1999), 687–696.
- [5] E. K. GODUNOVA AND V. I. LEVIN, *Neravenstva dlja funkcii širokogo klassa, soderzashego vypuklye, monotonnye i nekotorye drugie vidy funkii*, Vycislitel. Mat. i. Fiz. Mezvuzov. Sb. Nauc. Trudov, MGPI, Moskva, 1985, pp. 138–142.
- [6] H. HUDZIK AND L. MALIGRANDA, *Some remarks on s -convex functions*, Aequationes Math., **48** (1994), 100–111.
- [7] U. S. KIRMACI, M. K. BAKULA, M. E. OZDEMIR AND J. PECARIC, *Hadamard-type inequalities for s -convex functions*, Appl. Math. and Compt., **193** (2007), 26–35.
- [8] D. S. MITRINOVIC AND J. PECARIC, *Note on a class of functions of Godunova and Levin*, C. R. Math. Rep. Acad. Sci. Can., **12** (1990), 33–36.
- [9] D. S. MITRINOVIC, J. PECARIC AND A. M. FINK, *Classical and new inequalities in analysis*, Kluwer Academic, Dordrecht, 1993.
- [10] B. G. PACHPATTE, *On some inequalities for convex functions*, RGMIA Res. Rep. Coll., **6** (E), 2003.
- [11] S. VAROSANEC, *On h -convexity*, J. Math. Anal. Appl., **326** (2007), 303–311.