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ON HERMITE–HADAMARD INEQUALITIES FOR (k,h)–CONVEX SET–VALUED MAPS

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Abstract. We introduce the class of (k,h)-convex set-valued maps defined on k-convex domains by

$$h(t)G(x_1)+h(1-t)G(x_2)\subset G(k(t)x_1+k(1-t)x_2),\ x_1,x_2\in D,\ t\in[0,1],$$

and prove a Hermite-Hadamard-type theorem for such maps. Many other properties of (k,h)-convex set-valued maps are also presented.

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