

CONVEXITY IN FRACTIONAL h -DISCRETE CALCULUS

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Abstract. In this paper, we consider a time scale $h\mathbb{N}_a$, where $a \in \mathbb{R}$ and $h \in \mathbb{R}^+$. The fractional h -difference operator is defined in the sense of Riemann–Liouville with the forward difference operator Δ . First, we discuss monotonicity concept via fractional h -difference operators for the functions defined on $h\mathbb{N}_a$. Second, we obtain some criteria to have the functions be ν -convex.

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