

1145-39-2514

Allan Peterson* (apeterson1@math.unl.edu), 1400 R Street, Lincoln, NE 68588-0130. *A generalized h -fractional Gronwall's inequality and its applications for nonlinear h -fractional difference systems with "maxima".*

This paper gives a generalized h -fractional Gronwall's inequality. Applying this result, we prove the uniqueness and give bounds on solutions for a nonlinear h -fractional difference system with "maxima". Finally, we give an example to illustrate one of our main results. (Received September 25, 2018)