1154-VV-2489 **Areeba Ikram*** (aikram@mines.edu). *Lyapunov Inequalities for Discrete Fractional Nonlinear Boundary Value Problems.* Preliminary report.

We will begin by presenting background for discrete fractional calculus. Then, we will explore properties of solutions to certain nonlinear third-order boundary value problems. In particular, we will discuss a technique for obtaining Lyapunov inequalities for these BVPS which uses the integral form of a solution to a related second-order boundary value problem. Finally, we will mention a generalization of this technique for obtaining Lyapunov inequalities to higher-order BVPs. (Received September 17, 2019)