

1145-39-2978

**Areeba Ikram\*** (aikram@mines.edu). *Solutions to Particular Discrete Fractional Equations*. Preliminary report.

We will start by presenting the necessary background for discrete fractional calculus, highlighting appropriate analogues from ordinary differential equations. We will then explore solutions to  $N$ -th order discrete fractional equations and compare these solutions to solutions in the corresponding ordinary differential equations context. In particular, we will adopt analogous counterparts to  $(k, N-k)$  boundary value problems from ordinary differential equations, and we will consider solutions to these  $(k, N-k)$  boundary value problems in the discrete fractional context. (Received September 26, 2018)