Ferhan M. Atici (ferhan.atici@wku.edu), Paul W. Eloe* (Paul.Eloe@notes.udayton.edu) and Johnny Henderson (Johnny_Henderson@baylor.edu). Linear Fractional Difference Equations.

We continue our study of linear fractional difference equations with constant coefficients. In previous work, a transform method has been employed to solve linear fractional difference equations with constant coefficients. In the previous work, it is necessary that the orders of the fractional difference operators differ by integers. In this work, we investigate methods to solve linear fractional difference equations with constant coefficients in cases where the orders of the fractional difference operators differ by nonintegers. (Received January 11, 2007)