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Douglas R. Anderson* (andersod@cord.edu), 901 8th Street S., Department of Mathematics, Moorhead, MN 56562. *Alternative Solutions of Inhomogeneous Second-Order Linear Dynamic Equations on Time Scales.*

We exhibit an alternative method for solving inhomogeneous second-order linear ordinary dynamic equations on time scales, based on reduction of order rather than variation of parameters. Our form extends recent (and long-standing) analysis on \mathbb{R} to a new form for difference equations, quantum equations, and arbitrary dynamic equations on time scales. We apply our results to some nontrivial difference and q -difference equation examples. (Received May 27, 2010)