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Aghalaya S Vatsala* (vatsala@louisiana.edu), Department of Mathematics, University of Louisiana at Lafayette, Lafayette, LA 70504-1010, and **Sowmya Muniswamy** and **Donna Sue Stutson**. *Generalized Monotone Method, Numerical Approach for Ordinary and Fractional Differential Equations*. Preliminary report.

Generalized monotone method is an efficient theoretical as well as numerical method to solve ordinary and fractional differential equations. The method relies heavily on the computation of coupled lower and upper solutions on a desired interval. In this work, we present a methodology to compute the coupled lower and upper solutions to scalar as well as two systems to any desired interval. Some numerical examples are also presented which demonstrates the application of the theoretical results. (Received August 21, 2012)