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**Gary DeClerk\***, Hendrix College, 1600 Washington Avenue, Conway, AR 72032, and **Jeremiah Bill** and **Quan Nguyen**. *Geometric Mean Value Properties*. Preliminary report.

We look at variations on the classical mean value property of harmonic functions. We investigate functions for which the value at the center of a disk is equal to the geometric mean of the function on the boundary of the disk. We show that a function has this property if and only if its log is harmonic. We then take advantage of this property to approximate solutions to problems through an iterative numerical process. We close with a generalized version of this property using  $L^p$  averages along the boundary of disks. (Received September 17, 2013)