Constantine Georgakis* (cgeorgak@math.depaul.edu), Department of Mathematics, DePaul University, Chicago, IL 60614. *On the Quadratic Convergence of Heron’s Recursion for Roots.* Preliminary report.

An elementary derivation of the quadratic convergence, the stopping rule and the selection of the initial value for Heron’s recursive algorithm for finding the root of a positive real number is presented that is based on a simple polynomial identity and avoids entirely the use of differential calculus. (Received October 03, 2000)