1158-30-82 **Marc Chamberland***, 1116 8th Ave., Grinnell, IA 50112. *When are a Polynomial's Zeros all Real and Distinct?*

There are many algebraic and analytic results concerning the location of zeros of single-variable polynomials. This note provides necessary and sufficient conditions to determine whether the zeros of a polynomial are real and distinct. The conditions are a finite set of inequalities that depend only on the given polynomial and its derivatives. After laying out these results, we explore extending these to entire functions. (Received February 21, 2020)