

1067-26-399

Robert J. Blodgett* (Robert.Blodgett@fda.hhs.gov), Food and Drug Administration, 5100 Paint Branch Parkway, College Park, MD 20740. *A simple, general proof of Descartes' rule of signs.*

The application of basic calculus procedures show that Descartes' rule of signs is more than a specialized trick that applies to just polynomials. It is combined with the Budan-Fourier theorem and shown to apply to a very general family of functions. Calculus is shown to verify and extend the classical result beyond the original intent. (Received September 01, 2010)