1051-00-209 Martin Eugenio Avendano\* (avendano@math.tamu.edu), 306 Redmond Dr. Apt. 302, College Station, TX 77840-6602. Descartes' Rule is Exact! Preliminary report.

We show that for any univariate polynomial f with real coefficients, there exists a polynomial g with non-negative coefficients such that the number of positive real roots of f is exactly the number of changes of signs in the vector of coefficients of fg. If all the positive roots of f are simple, then g can also be chosen as a power of the binomial (x+1). (Received August 25, 2009)