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**Kenneth B Ascher\*** ([kennyascher@gmail.com](mailto:kennyascher@gmail.com)), 3444 Turf Road, Oceanside, NY 11572.

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There is no general formula, using rational functions and radicals, for the roots of polynomials of degree 5 or more. We show how to compute the number of real, non-zero roots of trinomials (of arbitrary degree) using a simple logarithmic inequality. Using the log-uniform distribution for the coefficients, we then prove that the number of real roots is  $3/2$  on average. Finally, we show how an "Archimedian" Newton Polygon gives an algorithm to efficiently approximate the roots of  $f$ . (Received July 31, 2010)