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Mohammed A. Qazi* (qazima@aol.com), Dept. of Mathematics, Tuskegee University, Tuskegee, AL 36088, and **Q. I. Rahman**, Dépt. de Mathématiques et de Statistique, Université de Montréal, Montréal, Québec H3C 3J7, Canada. *Extensions of Bernstein's Inequality to Rational Functions.*

Let \mathcal{P}_n be the class of all polynomials of degree at most n . It is known that if $f \in \mathcal{P}_n$ and $|f(z)| \leq 1$ on the unit circle, then $|f'(z)| \leq n|z|^{n-1}$ outside the unit disk. We present an 'extension' of this result to rational functions having all their poles in the open unit disk. (Received September 16, 2009)