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Let $f(x)$ be a polynomial with non-negative integer coefficients such that $f(b)$ is prime for some integer $b \geq 2$. A. Cohn's criteria states that if $b = 10$ and each coefficient is ≤ 9 , then $f(x)$ is irreducible. In 1988, M. Filaseta showed that the bound 9 can be replaced by 10^{30} . We will look at work that was done to further increase this bound and then generalize this for an arbitrary base b . Along the way, we will also establish additional irreducibility criteria. (Received September 15, 2013)