962-11-855 **Martha Allen** (`allen@math.sc.edu`), Department of Mathematics, University of South Carolina, Columbia, SC 29208. *On Generalizations of Irreducibility Theorems of I. Schur.* Preliminary report.

We will discuss generalizations of four irreducibility results of I. Schur. As an example, let $u_{2j} = 1 \times 3 \times 5 \times \cdots \times (2j-1)$ for $j \geq 0$. For n an integer > 1, define $f(x) = \sum_{j=0}^{n} a_j x^{2j}/u_{2j}$ where the a_j's are arbitrary integers with $|a_0| = 1$. Schur established that if $|a_n| = 1$, then $f(x)$ is irreducible over the rationals. We will investigate the case when $0 < |a_n| \leq 2n-1$ using Newton polygons and using analytic results concerning the distribution of primes.

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