

1096-01-19

Steven H. Weintraub* (shw2@lehigh.edu), Dept. of Mathematics, Lehigh University,
Bethlehem, PA 18015. *The irreducibility of the cyclotomic polynomials.*

It is a basic theorem of number theory that the cyclotomic polynomials are irreducible. This was first proved in the prime case by Gauss and in the general case by Kronecker, and has been reproved many times by many mathematicians. In this talk we will examine various proofs, not only for their intrinsic interest but also for the light they shed on the background knowledge and concerns of the mathematicians of the time. (Received May 15, 2013)