

1145-13-1145

Samuel H Chamberlin* (samuel.chamberlin@park.edu), 8700 NW River Park Dr. Box 30, Parkville, MO 64152, and **Azadeh Rafizadeh**. *A generalization of the Newton Girard formula to the monomial symmetric polynomials.*

The Newton-Girard Formula allows one to write any elementary symmetric polynomial as a sum of products of power sum symmetric polynomials and elementary symmetric polynomials of lesser degree. It has numerous applications. We have generalized this identity by replacing the elementary symmetric polynomials with monomial symmetric polynomials. We will also discuss an application of this formula to representations of Lie algebras. (Received September 19, 2018)