1057-52-174   **Benjamin J Braun*** (`benjamin.braun@uky.edu`), 714 Patterson Office Tower, Dept of Math, University of Kentucky, Lexington, KY 40506. *An Ehrhart Series Formula for Reflexive Polytopes.*

For lattice polytopes P and Q, the Ehrhart polynomial of the product of P and Q is the product of their Ehrhart polynomials. We show that when P is reflexive and Q contains 0 in its interior, there is a similar multiplicative relationship between the Ehrhart series for P, the Ehrhart series for Q, and the Ehrhart series for the free sum of P and Q. (Received January 21, 2010)