

Cyclic Analogues to Generating Functions for Various Integer Compositions

Meghan Moriah Gibson

Georgia Southern University, Statesboro, GA 30460

`mg05028@georgiasouthern.edu`

Integer compositions and related enumerative questions have been extensively studied. The cyclic analogues of these questions, however, have been surprisingly insufficiently considered. Using the cyclic construction of Flajolet and Soria, we obtain the generating function for cyclic compositions with parts under modulo conditions. With this generating function we present some statistics of the parts in cyclic compositions, and we will give other generating functions for various types of cyclic integer compositions.