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A Bijection Between Two Classes of Restricted Compositions,
Fibonacci Quart. **50** (2012), no. 4, 360–365

Abstract

Two proofs, one using generating functions, the other bijective, are given for the following theorem: The number of compositions of n into parts congruent to 1 (mod k) equals the number of compositions of $n + k - 1$ into parts greater than $k - 1$. This bijection is then proven to hold for palindromic compositions. A more general theorem is presented in conclusion.