

Title: Convolution sums of restricted divisor functions derived from Dirichlet convolution

Author(s): Su Yeon Kong, Yan Li and Daeyeoul Kim

In this article, the convolution sums of six restricted divisor functions considered by Glaisher are studied. Using the properties of Dirichlet convolution, we try to find the inverse functions of four restricted divisor functions and use these to find the formulae for the convolution sums under the given relatively primeness conditions.

Address:

Su Yeon Kong
Department of Mathematics and Institute
of Pure and Applied Mathematics
Jeonbuk National University
567 Baekje-daero, Deokjin-gu
Jeonju-si, Jeollabuk-do 54896
South Korea

Address:

Yan Li
Department of Applied Mathematics
China Agricultural University
Beijing 100083
China
and
State Key Laboratory of Cryptology
P. O. Box 5159
Beijing, 100878
China

Address:

Daeyeoul Kim
Department of Mathematics and Institute
of Pure and Applied Mathematics
Jeonbuk National University
567 Baekje-daero, Deokjin-gu
Jeonju-si, Jeollabuk-do 54896
South Korea