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Abstract

Let integers m, n be given. If $n > 0$, then $d(n)$ denotes the number of positive divisors of n. If $m > 0$ and $n \geq 0$, then $p_m(n)$ denotes the number of partitions of n into parts not exceeding m; conventionally $p_m(0) := 1$. On the strength of two identities of Euler this paper shows that the function $d(\cdot)$ can be expressed additively in terms of the restricted partition functions $p_m(\cdot)$, $m > 0$.