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**Abstract**

For each integer $n > 0$, $\sigma(n)$ denotes the sum of all positive divisors of $n$; $b(n)$ denotes the exponent ($\geq 0$) of the largest power of 2 dividing $n$, and then $0d(n) := n2^{-b(n)}$. For each integer $n \geq 0$, $q(n)$ denotes the number of partitions of $n$ into distinct parts; and $q_0(n)$ denotes the number of partitions of $n$ into distinct odd parts. Conventionally, $q(0) = q_0(0) := 1$. It is here demonstrated that the composite function $\sigma \circ 0d$ can be expressed additively in terms of the functions $q, q_0$. 