Mohamed El Bachraoui, Relatively Prime Partitions with Two and Three Parts, Fibonacci Quart. **46/47** (2008/2009), no. 4, 341–345.

Abstract

A set A of positive integers is relatively prime if $\gcd(A)=1$. A partition of n is relatively prime if its parts form a relatively prime set. The number of partitions of n into exactly k parts is denoted by p(n,k) and the number of relatively prime partitions into exactly k parts is denoted by $p_{\Psi}(n,k)$. In this note we give explicit formulas for $p_{\Psi}(n,2)$ and $p_{\Psi}(n,3)$ in terms of the prime divisors of n.