

Year: 2012

Vol.: 80

Fasc.: 3-4

Title: A note on two conjectures associated to Goldbach's problem

Author(s): Michael Coons

Chen and Chen recently proposed two conjectures on the structure of multiplicative functions f for which $f(p) + f(q) = f(p + q)$ for all odd primes p and q . In this note, we show that the second conjecture is either true unconditionally or follows from the first conjecture, depending on whether or not there is an odd prime p_0 such that $f(p_0) \neq 0$.

Address:

Michael Coons
University of Waterloo
Department of Pure Mathematics
Waterloo, Ontario, N2L 3G1
Canada