

Mean value of an arithmetic function associated with the Piltz divisor function

Meselem Karbas ¹, Abdallah Derbal²

¹ *Faculty of Science and Technology Djilali Bounaama Khemis Miliana University, 44225 , (Algeria)*

karras.m@hotmail.fr

² *Department of Mathematics. E.N.S., BP 92. Kouba 16016, Algiers, (Algeria)*

abderbal@yahoo.fr

Abstract Let k be a fixed integer, we define the multiplicative function $D_k(n) = \frac{d_k(n)}{d_k^*(n)}$, where $d_k(n)$ is the Piltz divisor function and d_k^* is the unitary analogue function of d_k . The main purpose of this paper is using the elementary methods to study the mean value of the function $D_k(n)$.

Keywords : The Piltz divisor function, mean value, unitary analogue function.