

ABSTRACT

REPRESENTATION OF POSITIVE INTEGERS AS SUMS OF TWO PERFECT SQUARES NUMBER

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Perfect square number is positive integers which built from the result of multiplication against itself, or can be called integer square. A multiplication of two integers is the simplest application which the result than is an integers.

Representation of sums two integer is simple from constructed of sums of two integers. Representation which is constructed of two integer is possible consist of same variation of form. Due to, the square of integer is a perfect square number, then sums of two integers is integers number. It can be said that representation of sums of two squares is positif integers.

It is not all positif integer can be represented as a sum of two perfect squares number. Primes number $p > 2$ can be stated as sum of two perfect square number if $p \equiv 1 \pmod{4}$. And $p = 2$ can be stated as sum of square numbers. But composite numbers can be stated as sums of two perfect square number if $n = N^2m$ with m is square free with no prime divisor in form $4k + 3$.

Keyword: integers, perfect squares number, representation of sum integers, prime number, compsite number