# Conjecture that relates both the lesser and the larger term of a pair of twin primes to the same number through two different functions 

Marius Coman<br>Bucuresti, Romania<br>email: mariuscoman13@gmail.com


#### Abstract

In this paper I conjecture that for any pair of twin primes $p$ and $p+2$ there exist an odd positive integer $n$ such that the value of Smarandache function for $n$ is equal to $p$ and the value of $M C$ function for $n$ is equal to $p+2$.


## Conjecture:

For any pair of twin primes $p$ and $p+2$, where $p \geq 5$, there exist a positive integer $n$ of the form $15 * k+18$ such that the value of Smarandache function for $n$ is equal to $p$ and the value of $M C$ function for $n$ is equal to $p+2$.

## Verifying the conjecture:

(for the first 11 pairs of twin primes)
: For $n=15$ the value of Smarandache function is equal to 5 and the value of $M C$ function is equal to 7;
: For $n=33$ the value of Smarandache function is equal to 11 and the value of MC function is equal to 13;
: For $n=51$ the value of Smarandache function is equal to 17 and the value of MC function is equal to 19;
: For $n=87$ the value of Smarandache function is equal to 29 and the value of $M C$ function is equal to 31;
: For $n=123$ the value of Smarandache function is equal to 41 and the value of MC function is equal to 43;
: For $n=177$ the value of Smarandache function is equal to 59 and the value of MC function is equal to 61;
: For $n=213$ the value of Smarandache function is equal to 71 and the value of MC function is equal to 73;
: For $n=303$ the value of Smarandache function is equal to 101 and the value of MC function is equal to 103;
: For $n=321$ the value of Smarandache function is equal to 107 and the value of MC function is equal to 109;
: For $n=411$ the value of Smarandache function is equal to 137 and the value of MC function is equal to 139;
: For $n=447$ the value of Smarandache function is equal to 149 and the value of $M C$ function is equal to 151.

