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

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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 MC function for n is equal to p + 2.

Conjecture:

For any pair of twin primes p and p + 2, where $p \ge 5$, there exist a positive integer n of the form 15*k + 18such that the value of Smarandache function for n is equal to p and the value of MC 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 MC 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 MC 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 MC function is equal to 151. | | |