# NONLINEAR RELATION BETWEEN PRIMES 

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Abstract. In this article a conjecture about nonlinear relation between primes is proposed.

Conjecture. For every prime number $m$ greater than or equal to 5 exists at least a prime number $n$ greater than or equal to 2 and less than $m$ such that $p=m n-(m+n)$ is prime .

The following table lists results for $m=5$ to 23 :

|  |  | p |  | p |  | p |  | p |  | p |  | p |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| m | 5 |  | 7 |  | 11 |  | 13 |  | 17 |  | 19 |  | 23 |
| n | 2 | 3 | 2 | 5 | 2 | 9 | 2 | 11 | 2 | 15 | 2 | 17 | 2 |
|  | 3 | 7 | 3 | 11 | 3 | 19 | 3 | 23 | 3 | 31 | 3 | 35 | 3 |
|  |  | 5 | 23 | 5 | 39 | 5 | 47 | 5 | 63 | 5 | 71 | 5 | 87 |
|  |  |  |  |  | 7 | 59 | 7 | 71 | 7 | 95 | 7 | 107 | 7 |
|  |  |  |  |  |  | 11 | 119 | 11 | 159 | 11 | 179 | 11 | 219 |
|  |  |  |  |  |  |  |  | 131 | 13 | 215 | 13 | 263 |  |
|  |  |  |  |  |  |  |  |  | 17 | 287 | 17 | 351 |  |
|  |  |  |  |  |  |  |  |  |  | 19 | 395 |  |  |

