Conjecture on the numbers obtained concatenating two primes p and q where q − p + 1 also prime

Abstract. In this paper I make the following conjecture: there exist, for any m prime of the form 6*k + 1, an infinity of primes n obtained concatenating a prime p with a prime q where q − p + 1 = m (example: for m = 457, prime, we have q - p + 1 = 457 for [p, q] = [11, 467], both primes, and the number n = 11467 is prime).

Conjecture 1:

There exist, for any m prime of the form 6*k + 1, an infinity of primes n obtained concatenating a prime p with a prime q where q − p + 1 = m.

Example:

: for m = 457, prime, we have q - p + 1 = 457 for [p, q] = [11, 467], both primes, and the number n = 11467 is prime.

The sequence of primes n for m = 7:

: 1117, 1723, 3137, 8389, 97103, 101107, 151157, 157163, 223229, 227233, 233239, 251257, 257263, 263269, 271277 (...) 104473104479, 104723104729 (...)
obtained for [p, q] = [11, 17], [17, 23], [31, 37], [83, 89], [97, 103], [101, 107], [151, 157], [157, 163], [223, 229], [227, 233], [233, 239], [251, 257], [257, 263], [263, 269], [271, 277] (...) [104473, 104479], [104723, 104729] (...)

Note the chain of six primes (223229, 227233, 233239, 251257, 257263, 263269) obtained for six consecutive pairs of primes [p, q = p + 6].

The sequence of primes n for m = 13:

: 719, 1123, 1931, 4153, 4759, 6173, 6779, 89101, 101113, 127139, 151163, 181193, 199211, 239251, 251263, 269281, 239251, 251263, 269281, 337349, 347359 (...)
obtained for [p, q] = [7, 19], [11, 23], [19, 31], [41, 53], [47, 59], [61, 73], [67, 79], [89, 101], [101, 113], [127, 139], [151, 163], [181, 193], [199, 211], [239, 251], [251, 263], [269, 281], [239, 251], [251, 263], [269, 281], [337, 349], [347, 359] (...)

The sequence of primes n for m = 19:

: 1129, 2341, 4159, 83101, 89107, 113131, 131149, 163181, 173191, 181199, 211229, 223241, 233251 (...)
obtained for [p, q] = [11, 29], [23, 41], [41, 59], [83, 101], [89, 107], [113, 131], [131, 149], [163, 181], [173, 191], [181, 199], [211, 229], [223, 241], [233, 251] (...)

The sequence of primes n for m = 31:

: 1747, 3767, 97127, 107137, 109139, 127157, 163193, 167197, 181211, 211241, 227257, 241271 (...)
104113104119, 104693104723 (...)
obtained for [p, q] = [17, 47], [37, 67], [97, 127], [107, 137], [109, 139], [127, 157], [163, 193], [167, 197], [181, 211], [211, 241], [227, 257], [241, 271] (...) [104113, 104119], [104693, 104723] (...)

The sequence of primes n for m = 601:

: 7607, 13613, 41641, 53653, 59659, 73673, 101701, 127727, 139739, 173773, 211811 (...)
obtained for [p, q] = [7, 607], [13, 613], [41, 641], [53, 653], [59, 659], [73, 673], [101, 701], [127, 727], [139, 739], [173, 773], [211, 811] (...)

The sequence of primes n for m = 1723:

: 111733, 791801, 1391861 (...)
obtained for [p, q] = [11, 1733], [79, 1801], [139, 1861] (...)

The sequence of primes n for m = 3001:

: 113011, 613061, 10930109, 22330223, 26930269 (...)
obtained for [p, q] = [11, 3011], [61, 3061], [109, 30109], [223, 30223], [269, 30269] (...)

The sequence of primes n for m = 9001:

: 299029, 679067, 1379137, 1739173, 2779277, 2819281 (...)
obtained for [p, q] = [29, 9029], [67, 9067], [137, 9137], [173, 9173], [277, 9277], [281, 9281] (...)

The sequence of primes n for m = 90001:

: 1190011, 2390023 (...)
obtained for [p, q] = [11, 90011], [23, 90023] (...)