Conjecture on the consecutive concatenation of the numbers nk+1 where k multiple of 3

Abstract. In this paper I make the following conjecture: for any k multiple of 3, the sequence obtained by the consecutive concatenation of the numbers n*k + 1, where n positive integer, has an infinity of prime terms. Examples: for k = 3, the sequence 1, 14, 147, 14710 (...) has the prime terms 14710131619, 14710131619222528313437 (...); for k = 6, the sequence 1, 7, 13, 19 (...) has the prime terms 17, 171319253137434955561 (...).

Conjecture:

For any k multiple of 3, the sequence obtained by the consecutive concatenation of the numbers n*k + 1, where n positive integer, has an infinity of prime terms. Examples: for k = 3, the sequence 1, 14, 147, 14710 (...) has the prime terms 14710131619, 14710131619222528313437 (...); for k = 6, the sequence 1, 7, 13, 19 (...) has the prime terms 17, 171319253137434955561 (...).

The sequence of primes for k = 3:

: 14710131619, 14710131619222528313437 (...)

The sequence of primes for k = 6:

: 17, 171319253137434955561, 171319253137434955616773 (...)

The sequence of primes for k = 12:

: 113253749617385971091211331451571691811932052 17, 1132537496173859710912113314515716918119320521722924 1253 (...)

The sequence of primes for k = 24:

: 125497397, 125497397121145169 (...)

The sequence of primes for k = 30:

: 131 (...)

The sequence of primes for k = 33:

: 13467100133 (...)

The sequence of primes for k = 36:

: 13773109145181217253289325361397433469505541577613649 (...)

The sequence of primes for k = 60:

: 161121181241301361, 16112118124130136142148154160166172178184190196110211081141 (...)

The sequence of primes for k = 90:

: 191, 191181271, 191181271361, 19118127136145154163172181190199110811 (...)

The sequence of primes for k = 120:

: 1121241361841 (...)

The sequence of primes for k = 150:

: 1151, 1151301451 (...)

The sequence of primes for k = 180:

: 11813615417219011081126114411621180119812161234125212701 (...)

The sequence of primes for k = 300:

: 1301, 1301601901120115011801 (...)

The sequence of primes for k = 900:

: 1901, 190118012701360145015401 (...)