A formula that produces from any prime p of the form 11+30k probably an infinity of semiprimes qr such that r+q=30m

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Abstract. In this paper I make a conjecture which states that from any prime p of the form 11 + 30*k can be obtained, through a certain formula, an infinity of semiprimes q*r such that r + q = 30*m, where m non-null positive integer.

Conjecture:

For any prime p of the form 11 + 30*k there exist an infinity of positive integers h such that 11 + 30*k + 210*h = q*r, where q, r are primes such that r + q = 30*m, where m is non-null positive integer.

Examples:

Let n = 11 + 210*k
: for k = 1, n = 221 = 13*17 and 13 + 17 = 1*30;
: for k = 4, n = 851 = 23*37 and 23 + 37 = 2*30;
: for k = 14, n = 2951 = 13*227 and 13 + 227 = 8*30;
: for k = 18, n = 221 = 17*223 and 17 + 223 = 8*30.

Let n = 41 + 210*k
: for k = 12, n = 2561 = 13*197 and 13 + 197 = 7*30;
: for k = 13, n = 2771 = 17*163 and 17 + 163 = 6*30;
: for k = 17, n = 3611 = 23*157 and 23 + 157 = 6*30;
: for k = 30, n = 6341 = 17*373 and 17 + 373 = 13*30.

Let n = 71 + 210*k
: for k = 7, n = 1541 = 23*67 and 23 + 67 = 3*30;
: for k = 8, n = 1751 = 17*103 and 17 + 103 = 4*30;
: for k = 9, n = 1961 = 37*53 and 37 + 53 = 3*30;
: for k = 10, n = 2171 = 13*167 and 13 + 167 = 6*30.

Let n = 101 + 210*k
: for k = 3, n = 731 = 17*43 and 17 + 43 = 2*30;
: for k = 8, n = 1781 = 13*137 and 13 + 137 = 5*30;
: for k = 21, n = 4511 = 13*347 and 13 + 347 = 12*30;
: for k = 24, n = 5141 = 53*97 and 53 + 97 = 5*30.

Let n = 131 + 210*k
: for k = 5, n = 1391 = 13*107 and 13 + 107 = 4*30;
: for k = 8, n = 2021 = 43*47 and 43 + 47 = 3*30;
: for k = 9, n = 2231 = 23*97 and 23 + 97 = 4*30;
: for k = 13, n = 3071 = 37*83 and 37 + 83 = 4*30.

Note:

The formula 11 + 30*k + 210*h (where 11 + 30*k is prime) seems also to produce sets of many consecutive primes; examples:

: n = 41 + 210*k is prime for k = 4, 5, 6, 7, 8, 9, 10, 11;

: n = 101 + 210*k is prime for k = 14, 15, 16, 17, 18, 19.