Conjectures about a way to express a prime as a sum of three other primes of a certain type

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Abstract. These conjectures state that any prime p greater than 60 can be written as a sum of three primes of a certain type from the following four ones: 10k + 1, 10k + 3, 10k + 7 and 10k + 9.

Conjecture 1a:

Any prime p of the form 10*k + 1, p > 60, can be written as a sum of three primes of the following forms:
: 10*x + 1, 10*y + 1 respectively 10*z + 1.

Examples:
: 61 = 11 + 31 + 19;
: 71 = 11 + 31 + 29 = 11 + 41 + 19.

Conjecture 1b:

Any prime p of the form 10*k + 1, p > 60, can be written as a sum of three primes of the following forms:
: 10*x + 1, 10*y + 3 respectively 10*z + 7.

Examples:
: 61 = 41 + 13 + 7 = 31 + 23 + 7 = 31 + 13 + 17;
: 71 = 41 + 23 + 7 = 41 + 13 + 17 = 31 + 23 + 7.

Conjecture 1c:

Any prime p of the form 10*k + 1, p > 60, can be written as a sum of three primes of the following forms:
: 10*x + 7, 10*y + 7 respectively 10*z + 7.

Examples:
: 61 = 7 + 17 + 37 = 7 + 7 + 47;
: 71 = 17 + 17 + 37 = 7 + 17 + 47.

Conjecture 1d:

Any prime p of the form 10*k + 1, p > 60, can be written as a sum of three primes of the following forms:
: 10*x + 3, 10*y + 9 respectively 10*z + 9.

Examples:
: 61 = 13 + 19 + 29 = 23 + 19 + 19;
: 71 = 23 + 19 + 29 = 13 + 29 + 29.

Conjecture 2a:

Any prime p of the form 10*k + 3, p > 60, can be written as a sum of three primes of the following forms:
: 10*x + 1, 10*y + 1 respectively 10*z + 1.

Conjecture 2b:

Any prime p of the form 10*k + 3, p > 60, can be written as a sum of three primes of the following forms:
: 10*x + 1, 10*y + 3 respectively 10*z + 9.

Conjecture 2c:

Any prime p of the form 10*k + 3, p > 60, can be written as a sum of three primes of the following forms:
: 10*x + 3, 10*y + 3 respectively 10*z + 7.

Conjecture 2d:

Any prime p of the form 10*k + 3, p > 60, can be written as a sum of three primes of the following forms:
: 10*x + 7, 10*y + 7 respectively 10*z + 9.

Conjecture 3a:

Any prime p of the form 10*k + 7, p > 60, can be written as a sum of three primes of the following forms:
: 10*x + 1, 10*y + 3 respectively 10*z + 3.

Conjecture 3b:

Any prime p of the form 10*k + 7, p > 60, can be written as a sum of three primes of the following forms:
: 10*x + 3, 10*y + 7 respectively 10*z + 7.

Conjecture 3c:

Any prime p of the form 10*k + 7, p > 60, can be written as a sum of three primes of the following forms:
: 10*x + 1, 10*y + 7 respectively 10*z + 9.

Conjecture 3d:

Any prime p of the form 10*k + 7, p > 60, can be written as a sum of three primes of the following forms:
: 10*x + 9, 10*y + 9 respectively 10*z + 9.

Conjecture 4a:

Any prime p of the form 10*k + 9, p > 60, can be written as a sum of three primes of the following forms:
: 10*x + 1, 10*y + 1 respectively 10*z + 7.

Conjecture 4b:

Any prime p of the form 10*k + 9, p > 60, can be written as a sum of three primes of the following forms:
: 10*x + 3, 10*y + 3 respectively 10*z + 3.

Conjecture 4c:

Any prime p of the form 10*k + 9, p > 60, can be written as a sum of three primes of the following forms:
: 10*x + 3, 10*y + 7 respectively 10*z + 9.

Conjecture 4d:

Any prime p of the form 10*k + 9, p > 60, can be written as a sum of three primes of the following forms:
: 10*x + 1, 10*y + 9 respectively 10*z + 9.

Addenda

In one of my previous papers, "Two conjectures that relates any Poulet number by a type of triplets respectively of duplets of primes" I made the following two conjectures:

Conjecture:

Any square of a prime of the form p^2 = 10*k + 1 can be written as p^2 = x + y + z, where x, y, z are primes, not necessarily all three distinct, of the form 10*k + 7.
Examples:
: 11^2 = 121 = 37 + 37 + 47;
: 19^2 = 361 = 7 + 37 + 317.

Conjecture:

Any square of a prime of the form p^2 = 10*k + 9 can be written as p^2 = x + y + z, where x, y, z are primes, not necessarily all three distinct, of the form 10*k + 3.
Examples:
: 7^2 = 49 = 13 + 13 + 23;
: 19^2 = 169 = 13 + 43 + 113.