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Abstract. In this paper I make the following conjecture: Any square of a prime larger than 7 can be written as 30*n^2 + 60*n + p, where p prime or power of prime and n positive integer.

Conjecture:

Any square of a prime larger than 7 can be written as 30*n^2 + 60*n + p, where p prime or power of prime and n positive integer.

Verifying the conjecture:
(for the first fifteen primes larger than 7)

: 11^2 = 121 = 30*1^2 + 60*1 + 31;
: 13^2 = 169 = 30*1^2 + 60*1 + 79;
: 17^2 = 289 = 30*1^2 + 60*1 + 199 = 30*2^2 + 60*2 + 7^2;
: 19^2 = 361 = 30*1^2 + 60*1 + 271 = 30*2^2 + 60*2 + 11^2;
: 23^2 = 529 = 30*1^2 + 60*1 + 439 = 30*2^2 + 60*2 + 17^2 = 30*3^2 + 60*3 + 79;
: 29^2 = 841 = 30*1^2 + 60*1 + 751 = 30*2^2 + 60*2 + 601 = 30*4^2 + 60*4 + 11^2;
: 31^2 = 961 = 30*4^2 + 60*4 + 241;
: 37^2 = 1369 = 30*1^2 + 60*1 + 1279 = 30*2^2 + 60*2 + 1129 = 30*3^2 + 60*3 + 919;
: 41^2 = 1681 = 30*3^2 + 60*3 + 1231 = 30*4^2 + 60*4 + 31^2 = 30*5^2 + 60*5 + 631 = 30*6^2 + 60*6 + 241;
: 43^2 = 1849 = 30*1^2 + 60*1 + 1759 = 30*2^2 + 60*2 + 1609 = 30*3^2 + 60*3 + 1399 = 30*4^2 + 60*4 + 1129 = 30*6^2 + 60*6 + 409;
: 47^2 = 2209 = 30*3^2 + 60*3 + 1759 = 30*4^2 + 60*4 + 1489 = 30*6^2 + 60*6 + 769;
: 53^2 = 2809 = 30*1^2 + 60*1 + 2719 = 30*4^2 + 60*4 + 2089 = 30*5^2 + 60*5 + 1759 = 30*6^2 + 60*6 + 37^2 = 30*7^2 + 60*7 + 919 = 30*8^2 + 60*8 + 409;
: 59^2 = 3481 = 30*1^2 + 60*1 + 3391;
: 61^2 = 3721 = 30*1^2 + 60*1 + 3631 = 30*2^2 + 60*2 + 59^2 = 30*3^2 + 60*3 + 3271 = 30*4^2 + 60*4 + 3001 = 30*5^2 + 60*5 + 2671 = 30*6^2 + 60*6 + 2281 = 30*7^2 + 60*7 + 1831 = 30*8^2 + 60*8 + 1321 = 30*9^2 + 60*9 + 751 = 30*10^2 + 60*10 + 11^2;
: 67^2 = 4489 = 30*4^2 + 60*4 + 3769 = 30*6^2 + 60*6 + 3049 = 30*8^2 + 60*8 + 2089 = 30*11^2 + 60*11 + 199.