Three sequences of odd abundant numbers of the form
\((4k+2)*P + n*(2002k+1001)\) where \(P\) Poulet number

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Abstract. In this paper I present three sequences of numbers of the form \((4k + 2)*P + n*(2002k + 1001)\), where \(P\) is Poulet number, \(k\) natural and \(n\) integer (corresponding to \([P, n] = [41041, -1], [101101, 5]\) and \([401401, 35]\)); I conjecture that they have all the terms odd abundant numbers.

Three sequences of numbers of the form
\((4k + 2)*P + n*(2002k + 1001)\)
(where \(P\) is Poulet number, \(k\) natural and \(n\) integer)

Conjecture 1:
All numbers of the form \((4k + 2)*P + n*(2002k + 1001)\), where \([P, n] = [41041, -1]\), where \(k\) natural, are odd abundant numbers.

The first ten terms of the sequence: 81081, 243243, 405405, 567567, 729729, 891891, 1054053, 1216215, 1378377, 1540539.

Conjecture 2:
All numbers of the form \((4k + 2)*P + n*(2002k + 1001)\), where \([P, n] = [101101, 5]\), where \(k\) natural, are odd abundant numbers.

The first ten terms of the sequence: 207207, 621621, 1036035, 1450449, 1864863, 2279277, 2693691, 3108105, 3522519, 3963933.

Conjecture 3:
All numbers of the form \((4k + 2)*P + n*(2002k + 1001)\), where \([P, n] = [401401, 35]\), where \(k\) natural, are odd abundant numbers.

The first ten terms of the sequence: 837837, 2513511, 4189185, 5864859, 7540533, 9216207, 10891881, 12567555, 14243229, 15918903.