login

The OEIS is supported by the many generous donors to the OEIS Foundation.

THE ON-LINE ENCYCLOPEDIA OF INTEGER SEQUENCES ®

founded in 1964 by N. J. A. Sloane

Search

(Greetings from The On-Line Encyclopedia of Integer Sequences!)

A062695 Squarefree n such that the elliptic curve n*y^2 = x^3 - x arising in the "congruent number" problem has rank 2. 17

34, 41, 65, 137, 138, 145, 154, 161, 194, 210, 219, 226, 257, 265, 291, 299, 313, 323, 330, 353, 371, 386, 395, 410, 426, 434, 442, 457, 465, 505, 514, 546, 561, 602, 609, 651, 658, 674, 689, 721, 723, 731, 761, 777, 793, 866, 889, 890, 905, 915, 985, 987, 995

(list; graph; refs; listen; history; text; internal format)

OFFSET 1,1

COMMENTS These n are precisely the primitive congruent numbers (A006991) with n==1, n==2, or n==3 (mod 8). - T. D. Noe, Aug 02 2006

LINKS Jinyuan Wang, Table of n, a(n) for n = 1..453

A. Dujella, A. S. Janfeda, S. Salami, A Search for High Rank Congruent Number Elliptic Curves, JIS 12 (2009) 09.5.8

N. D. Elkies, Algorithmic (a.k.a. Computational) Number Theory: Tables, Links, etc.

G. Kramarz, All congruent numbers less than 2000, Math. Annalen, 273 (1986), 337-340.

G. Kramarz, All congruent numbers less than 2000, Math. Annalen, 273 (1986), 337-340. [Annotated, corrected, scanned copy]

Kazunari Noda and Hideo Wada, All congruent numbers less than 10000, Proc. Japan Acad. Ser. A Math. Sci., Volume 69, Number 6 (1993), 175-178.

PROG (PARI) r(n)=ellanalyticrank(ellinit([0, 0, 0, -n^2, 0]))[1]
for(n=1, 1e3, if(issquarefree(n)&&r(n)==2, print1(n", "))) \\ Charles R Greathouse IV, Sep 01 2011; corrected by Frank M Jackson, Aug 04 2016

CROSSREFS Cf. A003273, A006991, A062693, A062694, A259680-A259687.
Sequence in context: A337695 A045044 A108303 * A107730 A320703 A095419
Adjacent sequences: A062692 A062693 A062694 * A062696 A062697 A062698

KEYWORD nonn

AUTHOR Noam D. Elkies, Jul 04 2001

EXTENSIONS More terms from Jinyuan Wang, Dec 12 2020

STATUS approved

Maintained by The OEIS Foundation Inc.

Last modified August 20 12:51 EDT 2025. Contains 386856 sequences.

License Agreements, Terms of Use, Privacy Policy