A309030 Numbers k for which rank of the elliptic curve y^2=x^3+k*x is 3. [4]

323, 328, 399, 445, 579, 723, 904, 943, 1023, 1139, 1288, 1314, 1443, 1508, 1679, 1743, 1763, 1768, 1953, 2005, 2035, 2159, 2275, 2328, 2419, 2451, 2504, 2533, 2725, 2739, 2790, 2793, 2824, 2915, 2980, 3029, 3038, 3043, 3108, 3196, 3199, 3245, 3341, 3363, 3443, 3459, 3465

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

OFFSET 1,1

LINKS Table of n, a(n) for n=1..47.

PROG
```
(PARI) for(k=1, 3e3, if(ellanalyticrank(ellinit([0, 0, 0, k, 0]))[1]==3, print1(k", ")))
(Magma) for k in[1..4000] do if Rank(EllipticCurve([0, 0, 0, k, 0])) eq 3 then print k; end if; end for; // Vaclav Kotesovec, Jul 08 2019
```

CROSSREFS
```
Cf. A002158 (rank 0), A002159 (rank 1), A076329 (rank 2), this sequence (rank 3), A309031 (rank 4).
Cf. A309033.
Sequence in context: A253368 A334182 A033524 * A337781 A340099 A082947
Adjacent sequences: A309027 A309028 A309029 * A309031 A309032 A309033
```

KEYWORD nonn

AUTHOR Seiichi Manyama, Jul 08 2019

STATUS approved