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large integers that are or might be the smallest of their kind

 $Canonical\ name \qquad LargeIntegersThatAreOrMightBeTheSmallestOfTheirKind$

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Author Mravinci (12996)

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 $Related\ topic \qquad SmallIntegers That Are Or Might Be The Largest Of Their Kind$

For the purpose of this feature, the arbitrary cutoff is 10^7 .

19099919 is the smallest prime to start a Cunningham chain of length 8.

 $\bf 85864769$ is the smallest prime to start a Cunningham chain of length 9.

545587687 is the smallest class 13+ prime in the Erdos-Selfridge classification of primes.

635318657 is the smallest number that can be expressed as a sum of two fourth powers in two different ways.

823766851 is the smallest prime with primitive root 48.

906150257 is the smallest counterexample to Pólya's conjecture.

1023456789 is the smallest pandigital number in base 10.

1704961513 is the smallest class 14+ prime in the Erdős-Selfridge classification of primes.

10123457689 is the smallest pandigital prime in base 10.

26089808579 is the smallest prime to start a Cunningham chain of length 10.

665043081119 is the smallest prime to start a Cunningham chain of length 11.

554688278429 is the smallest prime to start a Cunningham chain of length 12.

 $10^{13} + 1$ is, as of 2005, the smallest candidate for a counterexample to the Mertens conjecture (though the smallest counterexample could turn out to be as large as 3.21×10^{64}).

4090932431513069 is the smallest prime to start a Cunningham chain of length 13.

95405042230542329 is the smallest prime to start a Cunningham chain of length 14.

810433818265726529159 is the smallest prime known to start a Cunningham chain of length 16, but there could be a smaller such prime.

439351292910452432574786963588089477522344721 is the smallest prime in Paul Hoffman's erroneous version of Wilf's primefree sequence in which $a_1 = 3794765361567513$, $a_2 = 20615674205555510$ and $a_n = a_{n-2} + a_{n-1}$ for n > 2.

If an odd perfect number exists, it is at least $10^{300} + 1$.