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multisieve

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MultiSieve is a computer program written by Mark Rodenkirch and designed for primality testing. It uses "both trial division and discrete logs as a sieve to eliminate numbers faster," according to Rodenkirch. It is available for Windows on the Intel x86 platform, and Rodenkirch has worked on a port for Mac OS X. According to the prime pages of the University of Tennessee at Martin, the largest prime MultiSieve has found so far is $338707 \times 2^{1354830} + 1$, approximately $9.97354620220965 \times 10^{407849}$.