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## EFFICIENT SIMPLE TESTS FOR PRIMALITY

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### Abstract

The tests form a general method to decide whether a given positive odd integer is composite or prime. The tests are based on the divisibility properties of the sum of two squared positive integers. The algorithms comprising the tests are polynomial-time algorithms.

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Key Words : *Algorithm, Composite, Generating Function, Greatest common divisor, Prime, Quotient, Remainder, Solving polynomial equation, Square.*

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