Name _____

Unlocking the Mystery of Prime Numbers: The Key to Numerical Secrets

Short Answer Key

1. Prime numbers are numbers greater than 1 that have only two factors: 1 and themselves.
2. The trial division method involves dividing a number by each integer up to its square root to determine if it's prime.
3. The Sieve of Eratosthenes is a method for finding all prime numbers up to a specified integer. It works by eliminating the multiples of each prime number from a list of numbers, leaving behind the prime numbers.
4. Divisibility rules for identifying prime numbers include rules such as if a number's last digit is even, or if the sum of its digits is divisible by 3, then it's not prime.
5. Prime numbers are significant in fields like cryptography because they are used to secure information and protect data from unauthorized access.