

Name \_\_\_\_\_

## Cracking the Code: Exploring the Goldbach Conjecture

### Multiple Choice Questions

1. Who first proposed the Goldbach Conjecture?
  - a) Isaac Newton
  - b) Christian Goldbach
  - c) Euclid
  - d) Pythagoras
  
2. What does the Goldbach Conjecture propose?
  - a) Every odd integer can be expressed as the sum of two prime numbers.
  - b) Every number can be expressed as the sum of two composite numbers.
  - c) Every prime number can be expressed as the sum of two even numbers.
  - d) Every even integer can be expressed as the sum of two prime numbers.
  
3. Which of the following examples is consistent with the Goldbach Conjecture?
  - a)  $3 = 1 + 2$
  - b)  $8 = 2 + 3$
  - c)  $12 = 5 + 5$
  - d)  $15 = 3 + 7$
  
4. How long has the Goldbach Conjecture been proposed?
  - a) Over two centuries
  - b) Over a century
  - c) Over three centuries
  - d) Over four centuries
  
5. What is the significance of the Goldbach Conjecture?
  - a) It proves the existence of infinite prime numbers.
  - b) It demonstrates the connection between odd and even numbers.
  - c) It provides insights into the distribution of prime numbers.
  - d) It explains the properties of irrational numbers.

