

# Fundamentals of Number Theory

Number Theory · Answer Key · 10 Questions

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1. What is the smallest prime number?

- A) 0
- B) 1
- C) 2**
- D) 3

2. Which of the following numbers is a perfect square?

- A) 12
- B) 24
- C) 36**
- D) 48

3. What is the Greatest Common Divisor (GCD) of 12 and 18?

- A) 2
- B) 3
- C) 6**
- D) 9

4. Which of these numbers is a composite number?

- A) 7
- B) 11
- C) 13
- D) 15**

5. What is the result of 15 modulo 4?

- A) 1**
- B) 2
- C) 3
- D) 4

6. Which of the following is an even prime number?

- A) 0
- B) 2**
- C) 4
- D) 8

**7. What is the prime factorization of 10?**

- A)  $2 \times 5$**
- B)  $1 \times 10$
- C)  $2 + 8$
- D)  $2 \times 2 \times 2$

**8. Which number is neither prime nor composite?**

- A) 0
- B) 1**
- C) 2
- D) 3

**9. What is the Least Common Multiple (LCM) of 4 and 6?**

- A) 2
- B) 10
- C) 12**
- D) 24

**10. How many factors does the number 7 have?**

- A) 1
- B) 2**
- C) 3
- D) 4