

CHAPTER-5 | Prime Time

QUIZ
PART-05

1. A prime number has:

- A. only one factor
- B. only two factors
- C. more than two factors
- D. no factors (B)

Explanation: A prime number has exactly two factors: 1 and the number itself.

2. Which of the following is a prime number?

- A. 9
- B. 12
- C. 13
- D. 15 (C)

Explanation: 13 has only two factors, 1 and 13, so it is prime.

3. Which of the following is a composite number?

- A. 7
- B. 11
- C. 17
- D. 18 (D)

Explanation: 18 has more than two factors, so it is a composite number.

4. The factors of a prime number are:

- A. 1 only
- B. the number itself only
- C. 1 and the number itself
- D. 2 and the number itself (C)

Explanation: This is the defining property of a prime number.

5. The number 1 is:

- A. prime
- B. composite
- C. even prime
- D. neither prime nor composite (D)

Explanation: The number 1 has only one factor, so it is neither prime nor composite.

6. How many prime numbers are there from 21 to 30?

- A. 1
- B. 2
- C. 3
- D. 4 (B)

Explanation: The prime numbers from 21 to 30 are 23 and 29, so there are 2.

7. How many composite numbers are there from 21 to 30?

- A. 6
- B. 7
- C. 8
- D. 9 (C)

Explanation: From 21 to 30, only 23 and 29 are prime. The remaining 8 numbers are composite.

8. Which of the following is the only even prime number?

- A. 1
- B. 2
- C. 4
- D. 6 (B)

Explanation: 2 is the only even number with exactly two factors.

9. Which of the following lists contains only prime numbers?

- A. 2, 3, 5, 7
- B. 2, 4, 5, 7
- C. 3, 6, 11, 13
- D. 5, 9, 11, 17 (A)

Explanation: All numbers in option A have exactly two factors.

10. Which method shown in the chapter is used to find prime numbers?

- A. Tally marks
- B. Bar graph
- C. Sieve of Eratosthenes
- D. Pictograph (C)

Explanation: The chapter shows the Sieve of Eratosthenes as a method to identify prime numbers.