

CHAPTER-1 | Number System

QUIZ
PART-01

1. What is the rational number between 3 and 4?

- A. $5/2$
B. $3/5$
C. $6/5$
D. None of the above (A)

Explanation: The rational numbers between 3 and 4 include fractions such as $5/2$, $6/2$, etc.

2. What is the value of $\frac{1}{2} - \frac{3}{5}$?

- A. $3/10$
B. $3/5$
C. $6/5$
D. None of the above (A)

Explanation: The subtraction of the two fractions

is calculated as $\frac{1}{2} - \frac{3}{5} = \frac{3}{10}$.

3. How many rational numbers exist between any two given rational numbers?

- A. One
B. Zero
C. Infinitely many
D. None of the above (C)

Explanation: There are infinitely many rational numbers between any two given rational numbers.

4. Which of the following is an example of an irrational number?

- A. $\sqrt{2}$
B. $1/3$
C. $5/4$
D. None of the above (A)

Explanation: $\sqrt{2}$ is an irrational number because it cannot be expressed as a fraction of two integers.

5. Which number is not a whole number?

- A. 5
B. -3
C. 0
D. None of the above (B)

Explanation: -3 is not a whole number since whole numbers start from 0 and go upwards.

6. What is the decimal expansion of $1/7$?

- A. 5
B. -3
C. 0
D. None of the above (A)

Explanation: The decimal expansion of $1/7$ is a repeating decimal: $0.142857\dots$

7. What is the term used for numbers that can be expressed as a fraction?

- A. 0.142857
B. 0.3333
C. 0.6666
D. None of the above (A)

Explanation: Rational numbers are numbers that can be expressed in the form of $\frac{p}{q}$, where p and q are integers and $q \neq 0$.

8. Which of the following is a property of rational numbers?

- A. They have non-terminating decimals
B. They can be expressed as fractions
C. Their decimals never repeat
D. None of the above (B)

Explanation: Rational numbers can always be expressed as fractions (p/q), where p and q are integers.

9. Which is the smallest rational number?

- A. They have non-terminating decimals
B. They can be expressed as fractions
C. Their decimals never repeat
D. None of the above (B)

Explanation: -1 is smaller than 0 and 1 on the number line.

10. What is the value of $\frac{2}{5} + \frac{3}{5}$?

- A. 1
B. $5/5$
C. $6/5$
D. None of the above (A)

Explanation: The sum of $\frac{2}{5} + \frac{3}{5} = \frac{5}{5} = 1$.