📘 CLASS 9 MATHEMATICS

📝 CHAPTER 3 – THE WORLD OF NUMBERS

🌟 MCQ WORKSHEET | Ganita Manjari | 2026–27

These MCQs are based on the **new Chapter 3 – "The World of Numbers"** from *Ganita Manjari*. The chapter includes the development of number systems, natural numbers, whole numbers, integers, rational and irrational numbers, real numbers, properties of operations, exponents and number representation.

Name: _____
Class: IX **Section:** _____
Date: _____

📌 Instructions

- Choose the **one correct answer**.
- Attempt all questions.
- **Total: 40 MCQs**

🟢 PART A – NUMBER SYSTEM BASICS

1. Which of the following is a natural number?

A. 0
B. −3
C. 7
D. −8

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2. The set of natural numbers is:

A. {0, 1, 2, 3, ...}
B. {1, 2, 3, 4, ...}

C. {..., -2, -1, 0, 1, 2, ...}
D. {1, 3, 5, 7, ...}

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3. Which of the following is a whole number but not a natural number?

A. 1
B. 2
C. 0
D. 5

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4. Which set contains positive and negative integers as well as zero?

A. Natural numbers
B. Whole numbers
C. Integers
D. Rational numbers

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5. Which of the following is an integer?

A. 3/5
B. √2
C. -7
D. 2.5

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6. The set of integers is represented by:

A. N
B. W
C. Z
D. Q

---

7. Which of the following is not an integer?

A. −9
B. 0
C. 12
D. `3/4`

---

8. The additive identity for integers is:

A. −1
B. 0
C. 1
D. 10

🔵 PART B – ZERO & INTEGERS

9. According to the rules of arithmetic with zero:

`a + 0 =`

A. 0
B. 1
C. a
D. −a

---

10. The value of:

`a × 0`

is:

A. a
B. 1
C. −a
D. 0

---

11. Which statement is correct?

A. `a - 0 = 0`
B. `a - 0 = a`
C. `a - 0 = -a`
D. `a - 0 = 1`

---

12. What is:

`-8 + 13`?

A. −21
B. −5
C. 5
D. 21

---

13. What is:

`-7 - 5`?

A. −12
B. −2
C. 2
D. 12

---

14. What is:

`(-6) × (-4)`?

A. −24
B. 24
C. −10
D. 10

---

15. What is:

`(-8) × 5`?

A. 40
B. −40
C. −13
D. 13

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16. The product of two negative integers is:

A. Always negative
B. Always positive
C. Always zero
D. Sometimes zero

🟡 PART C – RATIONAL NUMBERS

17. Which of the following is a rational number?

A. √2
B. π
C. 3/7
D. √5

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18. A rational number can be written in the form:

A. p/q, where p, q are integers and q ≠ 0
B. p/0
C. √p only
D. p × q only

---

19. Which of the following is a rational number?

A. 0.75
B. √3
C. π
D. √7

---

20. The decimal expansion of a rational number is:

A. Always non-terminating and non-repeating
B. Either terminating or non-terminating recurring
C. Always terminating
D. Always irrational

---

21. Which fraction has a terminating decimal expansion?

A. `1/3`
B. `2/7`
C. `3/8`
D. `5/11`

---

22. Which of the following is equivalent to `0.25`?

A. `1/2`
B. `1/4`
C. `2/5`
D. `3/4`

---

23. Which is greater?

A. `-2/3`
B. `-1/3`
C. Both are equal
D. Cannot be determined

---

24. The number `-5/8` lies:

A. To the right of 0 on the number line
B. To the left of 0 on the number line

C. At 0
D. At 1

🟠 PART D – IRRATIONAL & REAL NUMBERS

25. Which of the following is irrational?

A. `1/2`
B. `0.75`
C. `√2`
D. `-4`

---

26. Which of the following has a non-terminating, non-repeating decimal expansion?

A. `1/4`
B. `2/5`
C. `√2`
D. `3/8`

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27. Which of the following is irrational?

A. `√9`
B. `√16`
C. `√25`
D. `√7`

---

28. The set of rational and irrational numbers together is called:

A. Integers
B. Natural numbers

C. Real numbers
D. Whole numbers

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29. Which statement is true?

A. Every rational number is irrational
B. Every irrational number is rational
C. Every rational and irrational number is real
D. No irrational number is real

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30. Which of the following is a real number?

A. $\sqrt{2}$
B. $5/7$
C. -3
D. All of these

🔴 PART E – EXPONENTS & POWERS

31. The value of:

2^3

is:

A. 5
B. 6
C. 8
D. 9

---

32. The value of:

5^0

is:

A. 0
B. 1
C. 5
D. −1

---

33. Which expression is equal to:

$2^3 \times 2^4$?

A. 2^7
B. 2^{12}
C. 4^7
D. 2^1

---

34. $a^m \times a^n$ is equal to:

A. a^{m-n}
B. a^{m+n}
C. a^{mn}
D. $2a^{m+n}$

---

35. $a^m \div a^n$, where $a \neq 0$, is equal to:

A. a^{m+n}
B. a^{m-n}
C. a^{mn}
D. a^{n-m}

🟣 PART F – HIGHER-ORDER MCQs

36. Which statement is correct?

A. Every integer is a natural number
B. Every natural number is an integer
C. Every integer is irrational
D. Every irrational number is an integer

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37. Which number lies between √2 and √3?

A. 1
B. 2
C. √5
D. 3

---

38. If:

$x = -3$

then the value of:

x^2

is:

A. −9
B. −6
C. 6
D. 9

---

39. Which of the following statements about √2 is correct?

A. It is a natural number
B. It is an integer
C. It is rational
D. It is irrational

---

40. Which ordering is correct?

A. Natural ⊂ Whole ⊂ Integers ⊂ Rational ⊂ Real
B. Real ⊂ Rational ⊂ Integers ⊂ Whole
C. Integers ⊂ Natural ⊂ Rational ⊂ Real
D. Rational ⊂ Natural ⊂ Integers ⊂ Real

✅ ANSWER KEY

Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	**C**	11	**B**	21	**C**	31	**C**
2	**B**	12	**C**	22	**B**	32	**B**
3	**C**	13	**A**	23	**B**	33	**A**
4	**C**	14	**B**	24	**B**	34	**B**
5	**C**	15	**B**	25	**C**	35	**B**
6	**C**	16	**B**	26	**C**	36	**B**
7	**D**	17	**C**	27	**D**	37	**B**
8	**B**	18	**A**	28	**C**	38	**D**
9	**C**	19	**A**	29	**C**	39	**D**
10	**D**	20	**B**	30	**D**	40	**A**

🧠 CHAPTER 3 QUICK REVISION

🔢 Number Sets

Natural Numbers (N):

`{1, 2, 3, 4, ...}`

Whole Numbers (W):

`{0, 1, 2, 3, ...}`

Integers (Z):

$\{..., -3, -2, -1, 0, 1, 2, 3, ...\}$

The chapter introduces integers as an extension of the number line to include zero and negative numbers.

🟢 Rational Numbers

Numbers expressible as:

p/q, where p and q are integers and $q \neq 0$.

🔵 Irrational Numbers

Numbers that **cannot** be expressed as p/q.

Examples:

$\sqrt{2}, \sqrt{3}, \pi$

🟣 Real Numbers

Rational numbers + Irrational numbers = Real numbers

⭐ Important Sign Rules

$(+) \times (+) = +$

$(-) \times (-) = +$

$(+) \times (-) = -$

$(-) \times (+) = -$

⚡ Exponent Rules

$a^m \times a^n = a^{m+n}$

$a^m \div a^n = a^{m-n}$

$(a^m)^n = a^{mn}$

$a^0 = 1$, for $a \neq 0$

🏆 SCORE

36–40: 🌟 Excellent!
30–35: 👏 Very Good!
24–29: 👍 Good!
Below 24: 📚 Revise Chapter 3 and try again!