NUMBERS

Number System

For students preparing for MAH-B.BCA/BBA/BMS/BBM CET 2024 for admission to BCA, BBA, BMS, BBM

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1. Which of the following is an irrational number?
   A. $\sqrt{15}$
   B. $\sqrt{100}$
   C. $\sqrt{16}$
   D. $\sqrt{12/3}$

2. $\sqrt{6} \times \sqrt{27}$ is equal to:
   A. $9\sqrt{3}$
   B. $2\sqrt{2}$
   C. $3\sqrt{3}$
   D. $9\sqrt{2}$

3. If we multiply or divide two rational numbers, we get a/an _____
   A. natural number
   B. whole number
   C. rational Number
   D. irrational number

4. If we add or subtract an irrational number and a rational number (non-zero), then we get a/an _____ number.
   A. natural
   B. rational
   C. irrational
   D. rational or irrational

5. Subtract -5/9 from -3/7.
   A. 62/63
   B. -8/63
   C. 8/63
   D. -62/63

6. Compare $\frac{-8}{9} > \frac{4}{-5}$
   A. $\frac{-8}{9} > \frac{-4}{5}$
   B. $\frac{-4}{5} < \frac{-8}{9}$
   C. $\frac{-8}{9} = \frac{-4}{5}$
   D. $\frac{-8}{9} < \frac{-4}{5}$

7. Every rational number is
   A. Real number
   B. Natural number
   C. Whole number
   D. Integer

8. $2\sqrt{3}+\sqrt{3}$ is equal to
   A. $3\sqrt{3}$
   B. 6
   C. $4\sqrt{6}$
   D. $2\sqrt{6}$

9. By simplifying $(3+\sqrt{2}) * (\sqrt{3}+ \sqrt{2})$, we get _____
   A. $5 + 4\sqrt{6}$
   B. $5 + 2\sqrt{6}$
   C. 1
   D. 5

10. The decimal expansion of an irrational number may be:
   A. Recurring
   B. Non-terminating and non-recurring
   C. Terminating
   D. Either terminating or non- terminating

11. $\sqrt{4}$ is a _____ number.
   A. Neither rational or irrational
   B. Rational
   C. Irrational
   D. None of the above

12. $4\sqrt{6} + 7\sqrt{6}$ is equal to:
   A. $11\sqrt{6}$
   B. $10\sqrt{6}$
   C. $4\sqrt{12}$
   D. $8\sqrt{12}$

13. $\sqrt{12}$ X $\sqrt{15}$ is equal to
   A. $\sqrt{25}$
   B. $10\sqrt{5}$
   C. $5\sqrt{6}$
   D. $6\sqrt{5}$

14. $4\sqrt{5} + 5\sqrt{5}$ is equal to:

   A. $9\sqrt{10}$
   B. $9\sqrt{5}$
   C. $7\sqrt{5}$
   D. $5\sqrt{10}$

15. By simplifying $(\sqrt{7}+ \sqrt{5}) * (\sqrt{7} - \sqrt{5})$, we get _____
   A. 24
   B. 2
   C. 12
   D. 74

16. Compare the numbers $\frac{5}{4}$ and $\frac{2}{3}$.
   A. $\frac{5}{4} > \frac{2}{3}$
   B. $\frac{5}{4} < \frac{2}{3}$
   C. $\frac{5}{4} = \frac{2}{3}$
   D. None of the above

17. Compare the rational numbers $\frac{-7}{9}$ and $\frac{4}{5}$.
   A. $\frac{-7}{9} < \frac{4}{5}$
   B. $\frac{-7}{9} > \frac{4}{5}$
   C. $\frac{-7}{9} = \frac{4}{5}$
   D. None of the above

18. Compare the numbers $\frac{-7}{3}$ and $\frac{-5}{2}$
   A. $\frac{-7}{3} < \frac{-5}{2}$
   B. $\frac{-7}{3} > \frac{-5}{2}$
   C. $\frac{-7}{3} = \frac{-5}{2}$
   D. None of the above

19. The product of a rational and an irrational number is :
   A. Sometimes rational and sometimes irrational
   B. Always an integer
   C. Always a rational number
   D. Always an irrational number

20. Summation or Subtraction of two non-zero rational numbers is a/an _____
   A. natural number
   B. whole number
   C. rational Number
   D. irrational number

21. Which of the following are irrational numbers?
   A. $\sqrt{29}$
   B. $\sqrt{225}$
   C. 7.478478
   D. 0.3796

22. The decimal expansion of $\sqrt{2}$ is:
   A. finite decimal
   B. 1.4121
   C. non-terminating recurring
   D. non-terminating non-recurring

23. An integer can be:
   A. Only Positive
   B. Only Negative
   C. Both positive and negative
   D. None of the above

24. The value of $\frac{1}{2} + \frac{1}{4}$ is equal to:
   A. $\frac{3}{4}$
   B. $\frac{3}{2}$
   C. $\frac{2}{3}$
   D. 1

25. The value of (5/4) – (8/3) is:
   A. 17/12

B. -17/12
C. 12/17
D. -12/17

26. The value of
(-10/3) x (-15/2) x (17/19) x 0 is:
A. 0
B. 22.66
C. 20
D. 35

27. What is the sum of ⅔ and 4/9?
A. 6/3
B. 6/9
C. 10/9
D. 10/3

28. Which of the following is an irrational number?
A. 0.13
B. 0.1315
C. 0.1315
D. 0.301323100523 ....

29. Which of the following is a rational number?
A. π
B. √5
C. 0.101001000100001...
D. 0.835835835...

30. Which of the following statements is true?
A. π and $\frac{22}{7}$ are both rationals
B. π and $\frac{22}{7}$ are both irrationals
C. π is rational and $\frac{22}{7}$ is irrationals
D. π is irrationals and $\frac{22}{7}$ is rationals.

31. Which of the following is rational number?
A. √3+1
B. π
C. 2 √3
D. 0

32. Which of the following is a terminating decimal?
A. 0.123...
B. 0.33...
C. 0.525
D. 0.666...

33. What is the result of adding -1/3 and 1/2?
A. -5/6
B. 1/6
C. 1/3
D. -1/6

34. Which of the following is equivalent to 0.6 as a fraction?
A. 6/10
B. 3/5
C. 2/5
D. 1/2

35. Which of the following is both a rational and an integer?
A. √2
B. -3/2
C. Π
D. 0.75

Answer Key

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