

HOLIDAYS HOMEWORK
CLASS-VIII

CHOOSE THE CORRECT OPTION

1. What should be subtracted from $-5/4$ to get -1 ?
a. $-1/4$ b. $1/4$ c. 1 d. $-3/4$
2. Which of the following is the identity element?
a. 1 b. -1 c. 0 d. None of these
3. Which of the following is the Multiplicative identity for rational number?
a. 1 b. -1 c. 0 d. None of these
4. Which of the following is neither a positive nor a negative rational number?
a. 1 b. 0 c. Such a rational number does not exist d. None of these
5. Which of the following lies between 0 and -1 ?
a. 0 b. -3 c. $-2/3$ d. $4/3$
6. Which of the following is the reciprocal of rational number "a".
a. $-a$ b. A c. $1/a$ d. $-1/a$
7. Which of the following is the product of $7/8$ and $-4/21$?
a. $-1/6$ b. $1/12$ c. $-16/63$ d. $-147/16$
8. Which of the following is the product of $(-7/8)$ and $4/21$?
a. $-1/6$ b. 12 c. $-63/16$ d. $-16/147$
9. Which of the following is the reciprocal of the reciprocal of a rational number?
a. -1 b. 1 c. 0 d. The number itself
10. Which of the following quadrilaterals has two pairs of adjacent sides equal and diagonals intersecting at right angles?
a. square b. rhombus c. Kite d. rectangle.
11. Which of the following quadrilaterals has a pair of opposite sides parallel?
a. rhombus b. Trapezium c. Kite d. rectangle.
12. Which of the following quadrilaterals is a regular quadrilateral?
a. rectangle b. Square c. Rhombus d. kite.
13. Which of the quadrilaterals has all angles as right angles, opposite sides equal and diagonals bisect each other?
a. rectangle b. Rhombus c. Square d. none of these.
14. Which of the parallelograms has all sides equal and diagonals bisect each other at right angle?
a. square b. rectangle c. Rhombus d. trapezium.
15. In an isosceles parallelogram, we have:
(i) pair of parallel sides as equal (ii) pair of non-parallel sides as equal
(iii) pair of non-parallel sides as perpendicular (iv) none of these.
16. Which of the following is true for the adjacent angles of a parallelogram?
(i) they are equal to each other (ii) they are complementary angles
(iii) they are supplementary angles (iv) none of these.
17. The sides of a pentagon are produced in order. Which of the following is the sum of its exterior angles?
a. 540° b. 180° c. 720° d. 360°
18. Which of the following is a formula to find the sum of interior angles of a quadrilaterals of n -sides?
a. $\frac{n}{2} \times 180^\circ$ b. $\left(\frac{n+1}{2}\right) \times 180^\circ$
c. $\left(\frac{n-1}{2}\right) \times 180^\circ$ d. $(n-2) \times 180^\circ$
19. Diagonals of which of the following quadrilaterals do not bisect it into two congruent triangles?

a. rhombus b. trapezium c. square d. rectangle.

20. The reciprocal of a negative rational number is

a. negative b. Positive c. Does not exist d. None of these

FILL THE APPROPRIATE ANSWER.

21. Zero hasreciprocal.

21. The numbersandare their own reciprocals.

22. The reciprocal of -5 is.....

23. Reciprocal of $\frac{1}{x}$, where $x \neq 0$ is

24. The product of two rational numbers is always a

25. The reciprocal of a positive rational number is.....

26. If x is an even number, is the next odd number?

27. Two year ago my age was x years, was my age 5 years ago?

28. In a rhombus, diagonals intersect atangles.

29. A quadrilateral in which a pair of opposite sides is parallel is

30. The number of diagonals in a regular hexagon is

STATE TRUE/FALSE.JUSTIFY YOUR ANSWER.

31. All squares are rectangles.

32. A quadrilateral has only two diagonals.

33. Triangle is a polygon whose sum of exterior angles is double the sum of interior angles.

34. All rhombuses are squares.

35. Every whole number is a natural number.

36. Zero has no multiplicative inverse.

37. Every rational number is an integer.

38. Every integer is a rational number.

39. The successor of a two digit number is always a two digit number.

40. The natural number 1 has no predecessor.

Subjective Questions:

41. Use appropriate properties, find;

a) $-5/4(8/5 + 16)$

b) $1/2 \times 1/4 + (-7/18) \times 15/7 - 1/4 \times 1/3$

42. Multiply $8/13$ by the reciprocal of $-17/26$.

43. The sum of two rational number is $9/16$. If one of them is $3/8$, find the other.

44. Find the number of sides of a regular polygon whose each exterior angle is 36° .

45. Solve : $\frac{4-x}{7} - x = \frac{x-5}{3} + 1$

46. The tens digit of a 2-digit number is less than the ones digit by 3. If the digits are reversed, the difference between the two numbers is 27. If the sum of the digits is 11, find the numbers.

47. Two fifths of a number subtracted from three-fourths that number gives 14. What is the number?

48. The angles of a quadrilateral are in the ratio 3:5:4:6. How much does each of them measure?

49. Why is a rectangle a special parallelogram and a square, a special rectangle?
50. Write any three rational number between 0 and $\frac{1}{4}$.
51. If each sweet costs $2\frac{1}{2}$ rupees, how much do 20 sweets cost? If my friend paid $\frac{1}{3}$ of the amount and I paid the rest, calculate my share of the cost.
52. Simplify $\frac{7}{9} \times \frac{18}{-14} \times \frac{36}{21}$
53. Mohan's mother is 20 years older than him. Ten years ago, she was three times as old as Mohan was then. Find their present ages.
54. The length of a rectangle is 14 cm more than its breadth. If the perimeter is 448 cm, find the dimensions of the rectangle.
55. Solve $0.23x + 0.44 = 0.1(x+2) - 0.37x$
56. The diagonals of a rhombus PQRS intersect at O. If PR = 10 cm and QS = 24 cm, find the length of its sides.
57. In a parallelogram ABCD, if angle B is more than angle A. What is the measure of the angles of A, B, C, D?
58. In a rectangle ABCD, AC and BD intersect at O. If angle BOC = 40° . Find angle OBC and OCB.
59. Simplify: $-7(x-6) - 3x - 3 = 33(x+5) - 2x$
60. Show the following in the number line: $-\frac{1}{5}, \frac{2}{5}$ and $\frac{4}{5}$.

ANSWERS:

41. a) -22 b) $-\frac{19}{24}$
42. $-\frac{16}{17}$
43. $\frac{3}{16}$
44. 10
45. $\frac{26}{31}$
46. 47 or 74
47. 40
48. 60, 100, 80, 120
49. all angles are 90° ; all sides equal
50. any two
51. 140
52. $-\frac{12}{7}$
53. 20 and 40
54. L = 119 cm and B = 105 cm
55. -0.48
56. 13 cm
57. A = 65° , B = 115° , C = 65° and D = 115°
58. 70 each
59. $\frac{24}{11}$