## CLASS - VIII

1) Between any two given rational numbers there are countless rational numbers. The idea of _____ helps us to find rational numbers between 2 rationals
   1) Graph 2) Mean 3) Addition 4) Subtraction

2) Which of the following is the multiplicative inverse of $-1\frac{1}{8}$

   1) $1\frac{1}{8}$ 2) $\frac{9}{8}$ 3) $-\frac{9}{8}$ 4) $-\frac{8}{9}$

3) $2\frac{1.5}{5}+2\frac{1}{6}-1\frac{3.5}{15}=\frac{x^{\frac{1}{3}}}{4}+1\frac{7}{30}$ *then* $x=$ _____
   1) 2 2) 8 3) 324 4) 512

4) The value of 3.8 - (4.2 ÷ 0.7 × 3) + 5 × 2 ÷ 0.5 is _____
   1) 18.4 2) 5.8 3) 21.8 4) 15.6

5) If x=10 and y=0.1, which of the following is the greatest ?

   1) $x^2+y^2$ 2) $x^2-y^2$ 3) $x^2y^2$ 4) $\frac{x^2}{y^2}$

6) *If* $1^3+2^3+.....+9^3=2025$ *then the value of* $(0.11)^3+(0.22)^3+.....+(0.99)^3$ is close to :
   1) 0.2695 2) 0.3695 3) 2.695 4) 3.695

7) The perimeter of a rectangle is 13cm and its width is $2\frac{3}{4}$cm. Its length is ____cm.

   1) $4\frac{3}{4}$ 2) $\frac{15}{4}$ 3) $2\frac{3}{4}$ 4) $4\frac{2}{3}$

8) Present ages of Anu and Raj are in the ratio 4:5. Eight years from now the ratio of their ages will be 5:6. Their present ages are_____
   1) 40, 32 2) 32, 40 3) 28, 35 4) 35, 28

9) The cost of 4 rings and 2 bangles is 57,200 rupees. Then the cost of 6 rings and 3 bangles is _____
   1) 85,800 2) 95,800 3) 75,800 4) 65,800

10) A pineapple costs 7 rupees each, A water melon costs 5 rupees each. X spends 38 rupees on these fruits. The No.of pine apples purchased is _____
   1) 2 2) 3 3) 4 4) Data Inadequate

11) Ram has 6 rupees more than Mohan and 9 rupess more than Sohan. All the three persons have 33 rupees in all. Ram has a Share of Rs _____

1) 7 2) 10 3) 13 4) 16

12) If 74 is divided into two parts so that 5 times one part and 11 times the other part are together equal to 454. the parts are

1) 14, 60 2) 60, 14 3) 30, 44 4) 44, 30

13) A kite is a quadrilateral with exactly two pairs of _____ consecutive sides

1) equal 2) Perpendicular 3) Similar 4) None

14) If ABCD is a parallelogram then which of the following is true

1) $\angle B + \angle D = 180°$ 2) $AB = DC = 8cm,\ AD = 4cm,\ BC = 4.4cm$

3) $\angle A = 70°,\ \angle C = 65°$ 4) None of these

15) Sum of the angles of a convex polygon with 10 sides is _____

1) 360 2) 720 3) 1080 4) 1440

16) How many sides does a regular polygon have if each of its interior angles is 165 ?

1) 12 2) 24 3) 36 4) 18

17) What is the minimum interior angle possible for a regular polygon ?

1) 60 2) 30 3) 90 4) 120

18) A quadrilateral can be constructed uniquely if its 2 adjacent sides and ___angles are known

1) 1 2) 2 3) 3 4) 4

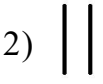
19) If 0-10, 10-20, 20-30, 30-40 are given class intervals then the observation 20 belongs to _____ class interval

1) 10-20 2) 20-30 3) both 4) none

20) In the class interval 10-20, the upper class limit is_____

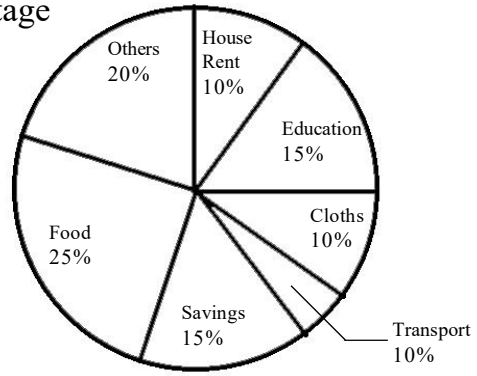
1) 20.5 2) 20 3) 19.5 4) 19

21) Which of the following is a Jagged line (brokenline)

1)  2) 

3)  4) 

22) Adjoining pie chart gives the monthly percentage expenditure on various items of a family. If monthly savings of the family is 18000 rupees then the monthly expenditure on transport Rs_____




1) 12000 2) 6000
3) 15000 4) 4000

23) HCF of $\frac{9}{10}, \frac{12}{25}, \frac{18}{35}, \frac{21}{40}$ *is* _____

1) $\frac{3}{5}$ 2) $\frac{252}{5}$ 3) $\frac{63}{700}$ 4) $\frac{3}{1400}$

24) When a die is thrown, The probability of an event of getting a prime number greater than 2 is _____

1) $\frac{1}{2}$ 2) $\frac{4}{6}$ 3) $\frac{1}{3}$ 4) 2

25) A _____ experiment is one whose out come can not be predicted exactly in advance

1) Perfect 2) Random 3) unknown 4) known

26) How many non-square numbers lie between two squares $(2023)^2$ and $(2024)^2$

1) 2023 2) 2024 3) 4046 4) 4048

27) If a natural number can not be expressed as a sum of successive odd natural numbers starting with 1, then it is not a perfect _____

1) Square 2) Cube 3) Square Root 4) Cube Root

28) We can express the square of any odd number as the sum of two consecutive _____ integers

1) positive 2) prime 3) odd 4) even

29) General form of the pythogoren triplet is _____

1) 2m, m+1, m-1 2) $2m^2, m^2+1, m^2-1$

3) $m^2, m^2+1, m^2-1$ 4) $2m, m^2-1, m^2+1$

30) The smallest square number which is divisible by each of numbers 6,9,15 is .....

1) 90 2) 900 3) 180 4) 450

31) If a perfect square has 11 digits then its square root will have _____digits
1) 5 2) 6 3) 5 or 6 4) none

32) Estimate the value of $\sqrt{350}$ to the nearest whole number
1) 18 2) 20 3) 19 4) none

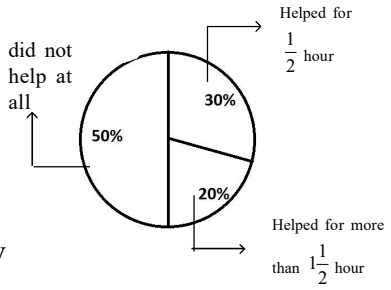
33) Square root is the _____ operation of square.
1) Direct 2) Inverse 3) Reciprocal 4) None

34) For what value of N, 270N will be a perfect square.
1) 1 2) 6 3) 4 4) 9

35) What is the least number that can be multiplied to 69120 to make it a perfect cube?
1) 2 2) 3 3) 25 4) 5

36) $\sqrt[3]{4913} + \sqrt[3]{12167} - \sqrt[3]{32768} =$ _____
1) 2 2) 8 3) 16 4) 38

37) In a primary school, the parents were asked about the No.of hours they spend per day in helping their children to do home work. There were 90 parents who helped for half an hour. (see adjoining figure and answer the question). How many said that they did not help ?




1) 50 2) 100
3) 150 4) 200

38) 72% of 25 students are intrested in mathematics. How many are not intrested in Mathematics ?
1) 18 2) 7 3) 9 4) 11

39) An article was purchased for 1239 rupees including GST of 18%. Find the price of the article before GST was added ?
1) 1000 2) 1050 3) 1080 4) 990

40) The ratio of the number of boys to the number of girls in a school of 640 students is 5 : 3. If 30 more girls admitted, then how many more boys should be admitted so that the ratio of boys : girls becomes 14 : 9.
1) 30 2) 25 3) 15 4) 20

41) A Shopkeeper purchased 200 bulbs for 10 rupees each. However 5 bulbs were fused and had to be thrown away. the remaining were sold at 12 rupees each. Find the gain %

1) 15% 2) 17% 3) 16% 4) 18%

42) The time period after which the intrest is added each time to form a new principal is called the _____ period

1) Transaction 2) Golden 3) Conversion 4) None

43) A cell was bought at a price of 20,000 rupees. Every year the value of the cell was depreciated by 20%. The value of cell after 4 years Rs_____.

1) 8192 2) 12,000 3) 12,800 4) 8000

44) Additional expenses made after buying an article are included in the cost price are known as _____ expenses.

1) Head 2) Extra 3) Over 4) overhead

45) Which of the following expression is a binomial expression

1) 6x+ 9x 2) 9x-6x 3) (9x)(6x) 4) None

46) Which of the following terms are like terms.

1) 6x, 6y 2) 6xy, 9xy 3) 6x,-6y 4) None

47) _____ is an equality, which is true for all values of the variables in the equality.

1) Equation 2) Polynomial 3) Identity 4) None

48) Terms are added to form_____

1) Equation 2) Expression 3) Factors 4) None

49) The difference between 31% of a number and 13% of the same number is 576. what is 17%of that number.

1) 544 2) 546 3) 540 4) 530

50) A man buys a house for 5 lakh rupees and rents it. He puts $12\frac{1}{2}\%$ of each month's rent aside for repairs, pays 1660 rupees as annual taxes and realizes 10% on his investiment thereafter. The monthly rent of the house Rs_____.

1) 4167 2) 4166.66 3) 4920 4) 4800

51) If A's income is 40% more than the income of B, then by what percentage B's income is less than the income of A ?

1) $27\frac{4}{7}\%$ 2) $28\frac{5}{7}\%$ 3) $27\frac{5}{7}\%$ 4) $28\frac{4}{7}\%$

52) The digits from 1 to 8 which does not appear in the decimal fraction of $\frac{22}{7}$ are.....

1) 3,6 2) 7,3 3) 3,5 4) 8,6

53) How much $66\frac{2}{3}\%$ of 312 rupees exceeds 200 rupees ?

1) 96 2) 4 3) 8 4) 104

54) A person sold an article at a loss of 8%. Had he sold it at a gain of 10.5%, he would have received 37 rupees more. What is the cost price of the article.

1) 200 2) 250 3) 240 4) 210

55) $\sqrt{1+\frac{1}{2^2}+\frac{1}{3^2}}+\sqrt{1+\frac{1}{3^2}+\frac{1}{4^2}}+\sqrt{1+\frac{1}{4^2}+\frac{1}{5^2}}=$ _____

1) $\frac{18}{5}$ 2) $\frac{4}{3}$ 3) $\frac{7}{3}$ 4) $\frac{33}{10}$

56) $\sqrt{729}+\sqrt{72.9}+\sqrt{7.29}=$ _____

1) 40.5 2) 45.6 3) 33.5 4) 38.23

57) *If* $x\%$ *of* $(768\div 6)=8^2$ *then* $x=$ _____

1) 25 2) 50 3) 40 4) 60

58) $\frac{(0.01)^2+(0.22)^2+(0.333)^2}{(0.001)^2+(0.022)^2+(0.0333)^2}=$ _____

1) 10 2) 100 3) 1000 4) 10000

59) When 200 is divided by a +ve integer x, the reminder is 8. How many values of such x are there?

1) 6 2) 7 3) 8 4) 14

60) Adjoining pie chart gives the time spent by a child during a day. The No.of hours spent on home work is ____hours(nearly) in a day

1) 6 2) 4
3) 8 4) 2