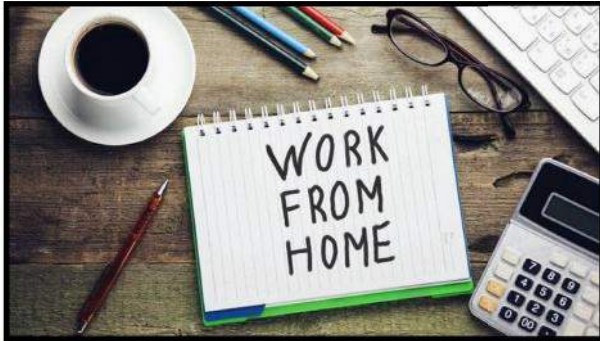# NAVYUG CONVENT SR. SEC. SCHOOL

WORK AT HOME ASSISGNMENT FOR SUMMER VACATION

SESSION 2020-21

Dear Parents

As you Know this is a very critical time for all of us in the <u>Lockdown Crisis</u>. So it is our responsibility to follow preventive measures for the safety and academic performance of our children. It is time to assist them not only their academics but also their life skills. Holiday home – work has been planned to keep them in touch with their studies as well as it provides a room for their creativity. For parents, it is the time to make children more self-conscious, self-disciplined and self-confident as well as aware of simple safety rules, mannerism and moral values.

So spend time with your ward fruitfully and purposefully.

*The weight-age of Holiday Homework will be 5 marks in Notebook Assessment as per given parameters:

	Marks obtains
a) **Completion of work-02**	————————
b) **Hand writing & Presentation 02**	————————
c) **Timely Submission-01**	————————

GUIDELINES FOR PARENTS :

Messages for parents working with children at home
As public conversations around corona virus disease 2020 (COVID-19) increase, children may worry about themselves, their family, and friends getting ill with COVID-19. Parents, family members, school staff, and other trusted adults can play an important role in helping children make sense of what they hear in a way that is honest, accurate, and minimizes anxiety or fear.

GENERAL PRINCIPLES TO AWARE CHILDREN :

1. Remain calm and reassuring.
2. Remember that children should follow your guidelines regarding corona-virus precautions. Generally they will pick up cues from the conversations you have with them and with others.
3. Make yourself available to listen and to talk.
4. Avoid making assumptions about who might have COVID-19.
5. Pay attention to what children see or hear on television, radio, or online.
6. Consider reducing the amount of screen time focused on COVID-19. Too much information on one topic can lead to anxiety.
7. Give children information that is truthful and appropriate for the age and developmental level of the child.
8. Talk to children about how some stories on COVID-19 on the Internet and social media may be based on rumors and inaccurate information.
9. Teach children everyday actions to reduce the spread of germs.
10. Remind children to stay away from people who are coughing or sneezing or sick.
11. Remind them to cough or sneeze into a tissue or their elbow, then throw the tissue into the trash or use own handkerchief .
12. Discuss any new actions that may be taken at school to help protect children and school staff.
13. Get children into a hand washing habit?
14. Teach them to wash their hands with soap and water for at least 20 seconds, especially after blowing their nose, coughing, or sneezing; going to the bathroom; and before eating or preparing food.

15. If soap and water are not available, teach them to use hand sanitizer. Supervise young children when they use hand sanitizer to prevent swallowing alcohol, especially in schools and child care facilities.
16. Try to keep information simple and remind them that health and school officials are working hard to keep everyone safe and healthy.

Note: Please do Holiday Homework in separate notebook.

ADMIN
NCS

कक्षा – आठवीं

संस्कृत

ग्रीष्मावकाश ग्रहकार्य

- क्त्वा, तुमुन् प्रत्यय: प्रयोग करके पांच_पांच शब्द बनाइए

- बालक, लता, फल शब्द रुप लिखें और याद करें

- पाठ -1, 2,3 प्रश्न उत्तर पूरे करें और याद करें

- कोई 4 श्लोक ए 4 शीट पर अर्थ सहित लिखें

कक्षा – आठवीं
हिन्दी
ग्रीष्मावकाश ग्रहकार्य

व्याकरण

1)भाषा,संज्ञा,सर्वनाम,क्रिया,

क्रिया विशेषण,विशेषण,समास,

अलंकार की परिभाषा लिखिए ।

2)दो औपचारिक और दो अनौपचारिक पत्र लिखिए ।

3)निबंध लिखिए

   उपविषय-1) आज का दौर

         2) इन्टरनेट के लाभ

          और हानि

HOLIDAY HOMEWORK
SUBJECT – SCIENCE
CLASS – VIII

Do the assignment in your notebook:-

1) Define the following terms:-
   a) Thresting   b) Malleable   c) Acrylic   d) Heat and electricity
2) Can you store lemon pickle in an aluminum utensil? Explain
3) Write 10 lines on the usefulness and harmful effects of microorganisms.
4) Why can be the process of pasteurization can be used?
5) Explain how soil gets affected by the continuous plantation of crops in a field.
6) Differentiate between - a) Fertilizers and manure
   b) Thermoplastic and thermosetting plastic
7) Write chemical properties of metals with suitable reactions used in details.
8) Draw a table how can diseases caused by microorganisms in animal and plants.

   Projects :-
1) Prepare a chart on " Say No to Plastics and also use slogans.
2) Collect the labels from the bottles of jams and jellies. Write down the list of contentsprinted on the labels.
3) Prepare a diagrammatic representation of Nitrogen cycle on A4 size paper
4) Learn and write complete syllabus in fair Notebook.

HOLIDAY HOMEWORK

SUBJECT – ENGLISH

CLASS – VIII

1. Revise the syllabus done so far for your periodic test preparation.
2. Write an essay of about 100-150 words on any of the following Topic:-
   a) You most treasured belonging.
   b) If I had a time machine.
3. You are Rohit / renuka a responsible citizen of your locality. Write a letter to the editor of a local newspaper regarding poor condition of roads in your area.
4. Write the summary of both chapters (How the camel got his hump and children at work) in your own words.
5. Newspaper Activity :- Pick out any two words from the newspaper everyday. Write their meaning and make sentence of your own in English notebook.
6. Write or prepare a WORD WALL of 20 difficult words that you learnt from the chapters.
7. Grammar Revise tense topic thoroughly and write 5 sentence for each type of tense in your notebook.

HOLIDAY HOMEWORK
SUBJECT – S.ST
CLASS – VIII
Note :- Do Holiday Home work in seprate notebook or do as directed

HISTORY :- Explore the following question and write their answers in fair notebook

1) Who was the first Indian to join the Indian Civil Services?
2) Which Indian ruler punished the people b making them plant trees for various offences?
3) What were "factories" in colonial period where nothing was manufactured?
4) Who introduced the following policies during colonial period-
   a) Subsidiary Alliances _____
   b) Doctrine of Lapse _____
   c) The Indian penal code (IPC) _____

Map Work – Show three presidencies of British Indian in the political Map of India.

Geography :- Do the following work as directed :-

1) Prepare a 'Comic page' as given in geography ch -01 and create your own imagination about – 'Wise Aways for Preventing COVID -19 / New ways to save life in COVID 19 crisies.(In separate A4- sheet with different colours)
2) Solve ' More enrichment activities (pg. 33 , ch- 3)

Civics: - 1) Our government has decided to construct our 'Own Parliament House" investing 2500 crore approx:-

Explain your point of view either in favor or against this decision.

2) Make a chart (only pastel sheet)and mention all the prime ministers and the presidents of India with their Tenure.

Note :- No hand written running hand is allowed to write text you may use stencil or cut &paste printout.

HOLIDAY HOMEWORK

SUBJECT – DRAWING

CLASS – VIII

1. Colour first five page in drawing book.

2. Make five still life in your Sketch Book

3. Make five painting in Sketch Book with pencil shading or colour

4. Do fabric painting with fabric colour on old pillow cover or white hanky.

HOLIDAY HOMEWORK
## SUBJECT – MATHS
CLASS – VIII

Note: - Revise all the syllabus done so far along with examples and do the given question in your holiday homework notebook

109. A carpenter charged Rs. 2500 for making a bed. The cost of materials used is Rs. 1100 and the labour charges are Rs. 200/hr. For how many hours did the carpenter work?

110. For what value of x is the perimeter of shape 77 cm?
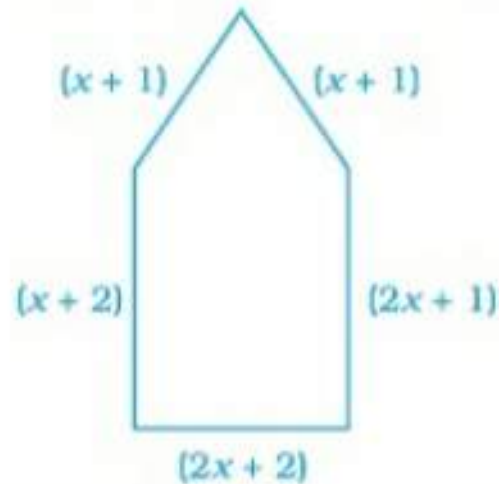
111. For what value of x is the perimeter of shape 186 cm?
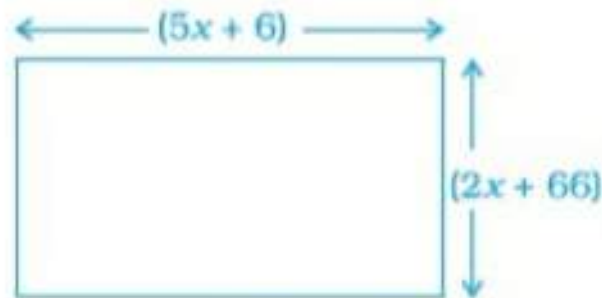

112. On dividing Rs. 200 between A and B such that twice of A's share is less than 3 times B's share by 200, B's share is?

113. Madhulika thought of a number, doubled it and added 20 to it. On dividing the resulting number by 25, she gets 4. What is the number?

79. Radha takes some flowers in a basket and visits three temples one by one. At each temple, she offers one half of the flowers from the basket. If she is left with 3 flowers at the end, find the number of flowers she had in the beginning.

80. Rs. 13500 are to be distributed among Salma, Kiran and Jenifer in such a way that Salma gets Rs. 1000 more than Kiran and Jenifer gets Rs. 500 more than Kiran. Find the money received by Jenifer.

81. The volume of water in a tank is twice of that in the other. If we draw out 25 litres from the first and add it to the other, the volumes of the water in each tank will be the same. Find the volume of water in each tank.

82. Anushka and Aarushi are friends. They have equal amount of money in their pockets. Anushka gave $\frac{1}{3}$ of her money to Aarushi as her birthday gift. Then Aarushi gave a party at a restaurant and cleared the bill by paying half of the total money with her. If the remaining money in Aarushi's pocket is Rs.1600, find the sum gifted by Anushka.

83. Kaustubh had 60 flowers. He offered some flowers in a temple and found that the ratio of the number of remaining flowers to that of flowers in the beginning is 3:5. Find the number of flowers offered by him in the temple.

84. The sum of three consecutive even natural numbers is 48. Find the greatest of these numbers.

85. The sum of three consecutive odd natural numbers is 69. Find the prime number out of these numbers.

86. The sum of three consecutive numbers is 156. Find the number which is a multiple of 13 out of these numbers.

87. Find a number whose fifth part increased by 30 is equal to its fourth part decreased by 30.

88. Divide 54 into two parts such that one part is $\frac{2}{7}$ of the other.

89. Sum of the digits of a two-digit number is 11. The given number is less than the number obtained by interchanging the digits by 9. Find the number.

90. Two equal sides of a triangle are each 4m less than three times the third side. Find the dimensions of the triangle, if its perimeter is 55m.

91. After 12 years, Kanwar shall be 3 times as old as he was 4 years ago. Find his present age.

92. Anima left one-half of her property to her daughter, one-third to her son and donated the rest to an educational institute. If the donation was worth Rs. 1,00,000, how much money did Anima have?

1. The height of a rectangle in a histogram shows the
   (a) Width of the class
   (b) Upper limit of the class
   (c) Lower limit of the class
   (d) Frequency of the class

2. A geometric representation showing the relationship between a whole and its parts is a
   (a) Pie chart   (b) Histogram   (c) Bar graph   (d) Pictograph

3. In a pie chart, the total angle at the centre of the circle is
   (a) 180°   (b) 360°   (c) 270°   (d) 90°

4. The range of the data 30, 61, 55, 56, 60, 20, 26, 46, 28, 56 is
   (a) 26   (b) 30   (c) 41   (d) 61

5. Which of the following is not a random experiment?
   (a) Tossing a coin
   (b) Rolling a dice
   (c) Choosing a card from a deck of 52 cards
   (d) Thowing a stone from a roof of a building

6. What is the probability of choosing a vowel from the alphabets?
   (a) $\dfrac{21}{26}$ (b) $\dfrac{5}{26}$ (c) $\dfrac{1}{26}$ (d) $\dfrac{3}{26}$

7. In a school only, 3 out of 5 students can participate in a competition. What is the probability of the students who do not make it to the competition?
   (a) 0.65   (b) 0.4   (c) 0.45   (d) 0.6

Students of a class voted for their favourite colour and a pie chart was prepared based on the data collected.

Observe the pie chart given below and answer questions 8 –10 based on it.
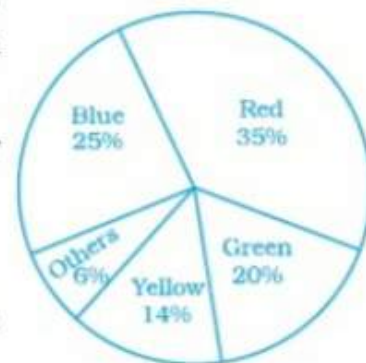
8. Which colour received $\dfrac{1}{5}$ of the votes?
   (a) Red   (b) Blue   (c) Green
   (d) Yellow

9. If 400 students voted in all, then how many did vote 'Others' colour as their favourite?
   (a) 6   (b) 20   (c) 24   (d) 40

10. Which of the following is a reasonable conclusion for the given data?
   (a) $\dfrac{1}{20}$ th student voted for blue colour
   (b) Green is the least popular colour
   (c) The number of students who voted for red colour is two times the number of students who voted for yellow colour
   (d) Number of students liking together yellow and green colour is approximately the same as those for red colour.

11. ....ed below are the temperature in °C for 10 days.
    8, 0, 3, 2, 0, 1, 5, 4, 4

Short Answer Type Questions

49. $\dfrac{3x-8}{2x} = 1$

50. $\dfrac{5x}{2x-1} = 2$

51. $\dfrac{2x-3}{4x+5} = \dfrac{1}{3}$

52. $\dfrac{8}{x} = \dfrac{5}{x-1}$

53. $\dfrac{5(1-x)+3(1+x)}{1-2x} = 8$

54. $\dfrac{0.2x+5}{3.5x-3} = \dfrac{2}{5}$

55. $\dfrac{y-(4-3y)}{2y-(3+4y)} = \dfrac{1}{5}$

56. $\dfrac{x}{5} = \dfrac{x-1}{6}$

57. $0.4(3x-1) = 0.5x + 1$

58. $8x - 7 - 3x = 6x - 2x - 3$

59. $10x - 5 - 7x = 5x + 15 - 8$

60. $4t - 3 - (3t+1) = 5t - 4$

61. $5(x-1) - 2(x+8) = 0$

62. $\dfrac{x}{2} - \dfrac{1}{4}\left(x - \dfrac{1}{3}\right) = \dfrac{1}{6}(x+1) + \dfrac{1}{12}$

63. $\dfrac{1}{2}(x+1) + \dfrac{1}{3}(x-1) = \dfrac{5}{12}(x-2)$

64. $\dfrac{x+1}{4} = \dfrac{x-2}{3}$

65. $\dfrac{2x-1}{5} = \dfrac{3x+1}{3}$

66. $1 - (x-2) - [(x-3) - (x-1)] = 0$

67. $3x - \dfrac{x-2}{3} = 4 - \dfrac{x-1}{4}$

68. $\dfrac{3t+5}{4} - 1 = \dfrac{4t-3}{5}$

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55. $\dfrac{y-(4-3y)}{2y-(3+4y)}=\dfrac{1}{5}$

56. $\dfrac{x}{5}=\dfrac{x-1}{6}$

57. $0.4(3x-1)=0.5x+1$

58. $8x-7-3x=6x-2x-3$

59. $10x-5-7x=5x+15-8$

60. $4t-3-(3t+1)=5t-4$

61. $5(x-1)-2(x+8)=0$

62. $\dfrac{x}{2}-\dfrac{1}{4}\left(x-\dfrac{1}{3}\right)=\dfrac{1}{6}(x+1)+\dfrac{1}{12}$

63. $\dfrac{1}{2}(x+1)+\dfrac{1}{3}(x-1)=\dfrac{5}{12}(x-2)$

64. $\dfrac{x+1}{4}=\dfrac{x-2}{3}$

65. $\dfrac{2x-1}{5}=\dfrac{3x+1}{3}$

66. $1-(x-2)-[(x-3)-(x-1)]=0$

67. $3x-\dfrac{x-2}{3}=4-\dfrac{x-1}{4}$

68. $\dfrac{3t+5}{4}-1=\dfrac{4t-3}{5}$

Fill in the Blanks Type Questions

16. In a linear equation, the _____ power of the variable appearing in the equation is one.

17. The solution of the equation $3x - 4 = 1 - 2x$ is _____.

18. The solution of the equation $2y = 5y - \dfrac{18}{5}$ is _____.

19. Any value of the variable which makes both sides of an equation equal is known as a _____ of the equation.

20. $9x -$ _____ $= -21$ has the solution (-2)

21. Three consecutive numbers whose sum is 12 are _____, _____ and _____.

22. The share of A when Rs 25 are divided between A and B so that A gets Rs. 8 more than B is _____.

23. A term of an equation can be transposed to the other side by changing its _____.

24. On subtracting 8 from x, the result is 2. The value of x is _____.

25. $\dfrac{x}{5} + 30 = 18$ has the solution as _____.

26. When a number is divided by 8, the result is -3. The number is _____.

27. 9 is subtracted from the product of p and 4, the result is 11. The value of p is _____.

28. If $\dfrac{2}{5}x - 2 = 5 - \dfrac{3}{5}x$, then $x =$ _____.

29. After 18 years, Swarnim will be 4 times as old as he is now. His present age is _____.

30. Convert the statement Adding 15 to 4 times x is 39 into an equation _____.

Fill in the Blanks Type Questions

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29. After 18 years, Swarnim will be 4 times as old as he is now. His present age is _____.

30. Convert the statement Adding 15 to 4 times x is 39 into an equation _____.

31. The denominator of a rational number is greater than the numerator by 10. If the numerator is increased by 1 the and denominator is decreased by 1, then expression for new denominator is _____.

32. The sum of two consecutive multiples of 10 is 210. The smaller multiple is _____.

True False Type Questions

1. The solution of which of the following equations is neither a fraction nor an integer.
   (a) $3x + 2 = 5x + 2$
   (b) $4x - 18 = 2$
   (c) $4x + 7 = x + 2$
   (d) $5x - 8 = x + 4$

2. The solution of the equation $ax + b = 0$ is

   (a) $x = \dfrac{a}{b}$
   (b) $x = -b$

   (c) $x = \dfrac{-b}{a}$
   (d) $x = \dfrac{b}{a}$

3. If $8x - 3 = 25 + 17x$, then x is

   (a) a fraction
   (b) an integer

   (c) a rational number
   (d) cannot be solved

4. The shifting of a number from one side of an equation to other is called

   (a) Transposition
   (b) Distributivity

   (c) Commutativity
   (d) Associativity

5. If $\dfrac{5x}{3} - 4 = \dfrac{2x}{5}$, then the numerical value of $2x - 7$ is

   (a) $\dfrac{19}{13}$
   (b) $-\dfrac{13}{19}$
   (c) 0
   (d) $\dfrac{13}{19}$

6. The value of x for which the expressions $3x - 4$ and $2x + 1$ become equal is

   (a) -3
   (b) 0
   (c) 5
   (d) 1

7. If a and b are positive integers, then the solution of the equation $ax = b$ has to be always

   (a) positive
   (b) negative
   (c) one
   (d) zero

8. Linear equation in one variable has

   (a) only one variable with any power.
   (b) only one term with a variable.
   (c) only one variable with power 1.
   (d) only constant term.

9. Which of the following is a linear expression:

   (a) $x^2 + 1$
   (b) $y + y^2$
   (c) 4
   (d) $1 + z$

10. A linear equation in one variable has

   (a) Only one solution
   (b) Two solutions
   (c) More than two solutions
   (d) No solution

Weights (in kg.)	Tally Marks	Frequency (Number of persons)
40 – 50	� ⅲⅲ II	
50 – 60	ⅲ ⅲ IIII	
60 – 70	ⅲ I	
70 – 80	II	
80 – 90	I	

Find the total number of persons whose weights are given in the above table.

102. Draw a histogram for the following data.

| Class interval	10–15	15–20	20–25	25–30	30–35	35–40
Frequency	30	98	80	58	29	50

103. In a hypothetical sample of 20 people, the amount of money (in thousands of rupees) with each was found to be as follows:

114, 108, 100, 98, 101, 109, 117, 119, 126, 131, 136, 143, 156, 169, 182, 195, 207, 219, 235, 118.

Draw a histogram of the frequency distribution, taking one of the class intervals as 50–100.

104. The below histogram shows the number of literate females in the age group of 10 to 40 years in a town.

(a) Write the classes assuming all the classes are of equal width.

(b) What is the classes width?

(c) In which age group are literate females the least?

(d) In which age group is the number of literate females the highest?
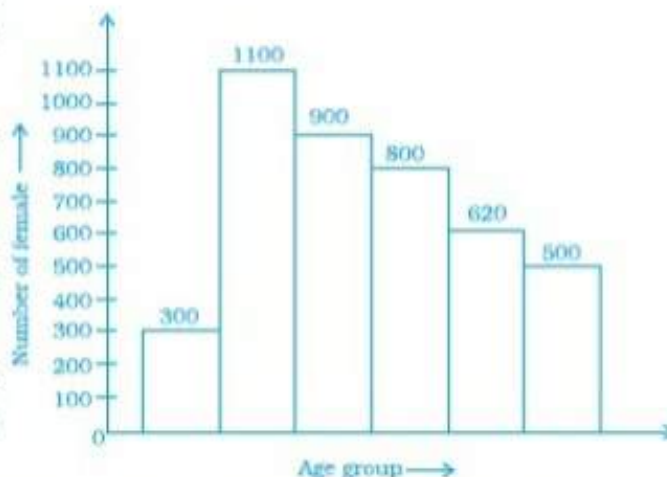
105. The following histogram shows the frequency distribution of teaching experiences of 30 teachers in various schools:
(a) What is the class width?
(b) How many teachers are having the maximum teaching experience and how many have the least teaching experience?
(c) How many teachers have teaching experience of 10 to 20 years?

91. Following are the number of members in 25 families of a village:

6, 8, 7, 7, 6, 5, 3, 2, 5, 6, 8, 7, 7, 4, 3, 6, 6, 6, 7, 5, 4, 3, 3, 2, 5. Prepare a frequency distribution table for the data using class intervals 0–2, 2–4, etc.

92. Draw a histogram to represent the frequency distribution in question 91.

93. The marks obtained (out of 20) by 30 students of a class in a test are as follows:

14, 16, 15, 11, 15, 14, 13, 16, 8, 10, 7, 11, 18, 15, 14, 19, 20, 7, 10, 13, 12, 14, 15, 13, 16, 17, 14, 11, 10, 20.

Prepare a frequency distribution table for the above data using class intervals of equal width in which one class interval is 4 –8 (excluding 8 and including 4).

94. Prepare a histogram from the frequency distribution table obtained in question 93.

95. The weights (in kg) of 30 students of a class are:

39, 38, 36, 38, 40, 42, 43, 44, 33, 33, 31, 45, 46, 38, 37, 31, 30, 39, 41, 41, 46, 36, 35, 34, 39, 43, 32, 37, 29, 26.

Prepare a frequency distribution table using one class interval as (30 – 35), 35 not included.

(i) Which class has the least frequency?

(ii) Which class has the maximum frequency?

hour?

85. The pie chart on the right shows the result of a survey carried out to find the modes of travel used by the children to go to school. Study the pie chart and answer the questions that follow.

(a) What is the most common mode of transport?

(b) What fraction of children travel by car?

(c) If 18 children travel by car, how many children took part in the survey?

(d) How many children use taxi to travel to school?

(e) By which two modes of transport are equal number of children travelling?

86. A dice is rolled once. What is the probability that the number on top will be

(a) Odd

(b) Greater than 5

(c) A multiple of 3

(d) Less than 1

(e) A factor of 36

(f) A factor of 6

Class Interval	Frequency
10 – 20	5
20 – 30	10
30 – 40	4
40 – 50	15
50 – 60	12

(a) What is the lower limit of the second class interval?

(b) What is the upper limit of the last class interval?

(c) What is the frequency of the third class?

(d) Which interval has a frequency of 10?

(e) Which interval has the lowest frequency?

(f) What is the class size?

83. The top speeds of thirty different land animals have been organised into a frequency table. Draw a histogram for the given data.

Maximum Speed (km/h)	Frequency
10 – 20	5
20 – 30	5
30 – 40	10
40 – 50	8
50 – 60	0
60 – 70	2

11. Listed below are the temperature in °C for 10 days.

   −6, −8, 0, 3, 2, 0, 1, 5, 4, 4

    What is the range of the data?

    (a) 8   (b) 13°C   (c) 10°C   (d) 12°C

12. Ram put some buttons on the table. There were 4 blue, 7 red, 3 black and 6 white buttons in all. All of a sudden, a cat jumped on the table and knocked out one button on the floor. What is the probability that the button on the floor is blue?

    (a) $\dfrac{7}{20}$ (b) $\dfrac{3}{5}$ (c) $\dfrac{1}{5}$ (d) $\dfrac{1}{4}$

13. Rahul, Varun and Yash are playing a game of spinning a coloured wheel. Rahul wins if spinner lands on red. Varun wins if spinner lands on blue and Yash wins if it lands on green. Which of the following spinner should be used to make the game fair?
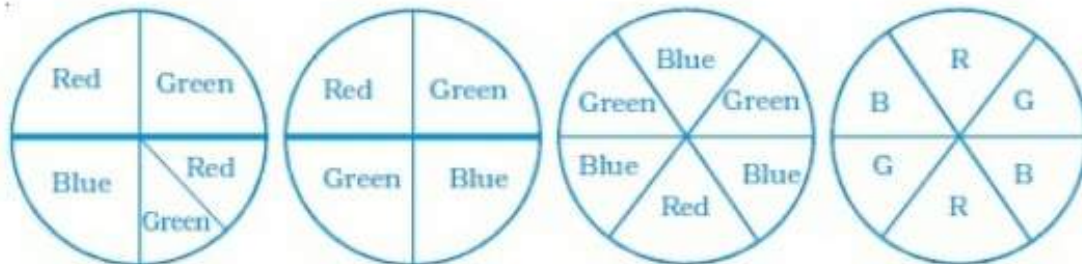
    (i)   (ii)   (iii)   (iv)

    (a) (i)   (b) (ii)   (c) (iii)   (d) (iv)

14. In a frequency distribution with classes 0–10, 10–20 etc., the size of the class intervals is 10. The lower limit of fourth class is

    (a) 40   (b) 50   (c) 20   (d) 30

15. A coin is tossed 200 times and head appeared 120 times. The probability of getting a head in this experiment is

    (a) $\dfrac{2}{5}$ (b) $\dfrac{3}{5}$ (c) $\dfrac{1}{5}$ (d) $\dfrac{4}{5}$

16. Data collected in a survey shows that 40% of the buyers are interested in buying a particular brand of toothpaste. The central angle of the sector of the pie chart representing this information is

    (a) 120°   (b) 150°   (c) 144°   (d) 40°

17. Monthly salary of a person is Rs. 15000. The central angle of the sector representing his expenses on food and house rent on a pie chart is 60°. The amount he spends on food and house rent is

    (a) Rs. 5000   (b) Rs. 2500   (c) Rs. 6000   (d) Rs. 9000

114. The cost of $\dfrac{19}{4}$ metres of wire is Rs. $\dfrac{171}{2}$. Find the cost of one metre of the wire.

115. A train travels $\dfrac{1445}{2}$ km in $\dfrac{17}{2}$ hours. Find the speed of the train in km/h.

116. If 16 shirts of equal size can be made out of 24m of cloth, how much cloth is needed for making one shirt?

117. $\dfrac{7}{11}$ of all the money in Hamid's bank account is Rs. 77,000. How much money does Hamid have in his bank account?

118. A $117\dfrac{1}{3}$ m long rope is cut into equal pieces measuring $7\dfrac{1}{3}$ m each. How many such small pieces are these?

119. $\dfrac{1}{6}$ of the class students are above average, $\dfrac{1}{4}$ are average and rest are below average. If there are 48 students in all, how many students are below average in the class?

120. $\dfrac{2}{5}$ of total number of students of a school come by car while $\dfrac{1}{4}$ of students come by bus to school. All the other students walk to school of which $\dfrac{1}{3}$ walk on their own and the rest are escorted by their parents. If 224 students come to school walking on their own, how many students study in that school?

121. Huma, Hubna and Seema received a total of Rs. 2,016 as monthly allowance from their mother such that Seema gets $\dfrac{1}{2}$ of what Huma gets and Hubna gets $1\dfrac{2}{3}$ times Seema's share. How much money do the three sisters get individually?

122. A mother and her two daughters got a room constructed for Rs. 62,000. The elder daughter contributes $\dfrac{3}{8}$ of her mother's contribution while the younger daughter contributes $\dfrac{1}{2}$ of her mother's share. How much do the three contribute individually?

123. Tell which property allows you to compare

$$\dfrac{2}{3}\times\left[\dfrac{3}{4}\times\dfrac{5}{7}\right] \text{ and} \left[\dfrac{2}{3}\times\dfrac{5}{7}\right]\times\dfrac{3}{4}$$

124. Name the property used in each of the following.

(i) $-\dfrac{7}{11}\times\dfrac{-3}{5}=\dfrac{-3}{5}\times\dfrac{-7}{11}$

(ii) $-\dfrac{2}{3}\times\left[\dfrac{3}{4}+\dfrac{-1}{2}\right]=\left[\dfrac{-2}{3}\times\dfrac{3}{4}\right]+\left[\dfrac{-2}{3}\times\dfrac{-1}{2}\right]$

(iii) $\dfrac{1}{3}+\left[\dfrac{4}{9}+\left(\dfrac{-4}{3}\right)\right]=\left[\dfrac{1}{3}+\dfrac{4}{9}\right]+\left[\dfrac{-4}{3}\right]$

(iv) $\dfrac{-2}{}$ ... $\dfrac{-2}{}$ ... 2

True False Type Questions

48. If $\dfrac{x}{y}$ is a rational number, then y is always a whole number.

49. If $\dfrac{p}{q}$ is a rational number, then p cannot be equal to zero.

50. If $\dfrac{r}{s}$ is a rational number, then s cannot be equal to zero.

51. $\dfrac{5}{6}$ lies between $\dfrac{2}{3}$ and 1.

52. $\dfrac{5}{10}$ lies between $\dfrac{1}{2}$ and 1.

53. $\dfrac{-7}{2}$ lies between -3 and -4.

54. $\dfrac{9}{6}$ lies between 1 and 2.

55. If $a \neq 0$, the multiplicative inverse of $\dfrac{a}{b}$ is $\dfrac{b}{a}$.

56. The multiplicative inverse of $\dfrac{-3}{5}$ is $\dfrac{5}{3}$.

57. The additive inverse of $\dfrac{1}{2}$ is -2.

58. If $\dfrac{x}{y}$ is the additive inverse of $\dfrac{c}{d}$, then $\dfrac{x}{y} + \dfrac{c}{d} = 0$.

59. For every rational number x, $x + 1 = x$.

60. If $\dfrac{x}{y}$ is the additive inverse of $\dfrac{c}{d}$, then $\dfrac{x}{y} - \dfrac{c}{d} = 0$

61. The reciprocal of a non-zero rational number $\dfrac{q}{p}$ is the rational number $\dfrac{q}{p}$.

62. If $x + y = 0$, then $-y$ is known as the negative of x, where x and y are rational numbers.

63. The negative of the negative of any rational number is the number itself.

64. The negative of 0 does not exist.

65. The negative of 1 is 1 itself.

Fill in the Blanks Type Questions

26. The equivalent of $\frac{5}{7}$, whose numerator is 45 is _____.

27. The equivalent rational number of $\frac{7}{9}$, whose denominator is 45 is _____.

28. Between the numbers $\frac{15}{20}$ and $\frac{35}{40}$, the greater number is _____.

29. The reciprocal of a positive rational number is _____.

30. The reciprocal of a negative rational number is _____.

31. Zero has _____ reciprocal.

32. The numbers _____ and _____ are their own reciprocal.

33. If y be the reciprocal of x, then the reciprocal of y^2 in terms of x will be _____.

34. The reciprocal of $\frac{2}{5} \times \left(\frac{-4}{9}\right)$ is _____.

35. $(213 \times 657)^{-1} = 213^{-1} \times$ _____.

36. The negative of 1 is _____.

37. For rational numbers $\frac{a}{b}, \frac{c}{d}$ and $\frac{e}{f}$ we have $\frac{a}{b} \times \left(\frac{c}{d} + \frac{e}{f}\right) =$ _____ + _____.

38. $\frac{-5}{7}$ is _____ than –3.

39. There are _____ rational numbers between any two rational numbers.

40. The rational numbers $\frac{1}{3}$ and $\frac{-1}{3}$ are on the _____ sides of zero on the number line.

41. The negative of a negative rational number is always a _____ rational number.

42. Rational numbers can be added or multiplied in any _____.

43. The reciprocal of $\frac{-5}{7}$ is _____.

44. The multiplicative inverse of $\frac{4}{3}$ is _____.

45. The rational number 10.11 in the from $\frac{p}{q}$ is _____.

8. One (1) is

   (a) the identity for addition of rational numbers.

   (b) the identity for subtraction of rational numbers.

   (c) the identity for multiplication of rational numbers.

   (d) the identity for division of rational numbers.

9. The additive inverse of $\dfrac{-7}{19}$ is

   (a) $\dfrac{-7}{19}$ (b) $\dfrac{7}{19}$ (c) $\dfrac{19}{7}$ (d) $\dfrac{-19}{7}$

10. Multiplicative inverse of a negative rational number is

   (a) a positive rational number.

   (b) a negative rational number.

   (c) 0

   (d) 1

11. If $x + 0 = 0 + x = x$, which is rational number, then 0 is called

   (a) identity for addition of rational numbers.

   (b) additive inverse of x.

   (c) multiplicative inverse of x.

   (d) reciprocal of x.

12. To get the product 1, we should multiply $\dfrac{8}{21}$ by

   (a) $\dfrac{8}{21}$ (b) $\dfrac{-8}{21}$ (c) $\dfrac{21}{8}$ (d) $\dfrac{-21}{8}$

13. $-(-x)$ is same as

   (a) $-x$ (b) x (c) $\dfrac{1}{x}$ (d) $\dfrac{-1}{x}$

14. The multiplicative inverse of $-1\dfrac{1}{7}$ is

   (a) $\dfrac{8}{7}$ (b) $\dfrac{-8}{7}$ (c) $\dfrac{7}{8}$ (d) $\dfrac{7}{-8}$

15. If x be any rational number then $x + 0$ is equal to

   (a) x (b) 0   (c) $-x$ (d) Not defined

16. The reciprocal of 1 is

   (a) 1   (b) -1 (c) 0   (d) Not defined

17. The reciprocal of -1 is

   (a) 1   (b) -1 (c) 0   (d) Not defined

18. The reciprocal of 0 is

   (a) 1   (b) -1 (c) 0   (d) Not defined

1. A number which can be expressed as $\dfrac{p}{q}$ where p and q are integers and $q \neq 0$ is
   (a) natural number.
   (b) whole number.
   (c) integer.
   (d) rational number.

2. A number of the form $\dfrac{p}{q}$ is said to be a rational number if
   (a) p and q are integers.
   (b) p and q are integers and $q \neq 0$
   (c) p and q are integers and $p \neq 0$
   (d) p and q are integers and $p \neq 0$ also $q \neq 0$.

3. The numerical expression $\dfrac{3}{8} + \dfrac{(-5)}{7} = \dfrac{-19}{56}$ shows that
   (a) rational numbers are closed under addition.
   (b) rational numbers are not closed under addition.
   (c) rational numbers are closed under multiplication.
   (d) addition of rational numbers is not commutative.

4. Which of the following is not true?
   (a) rational numbers are closed under addition.
   (b) rational numbers are closed under subtraction.
   (c) rational numbers are closed under multiplication.
   (d) rational numbers are closed under division.

5. $-\dfrac{3}{8} + \dfrac{1}{7} = \dfrac{1}{7} + \left(\dfrac{-3}{8}\right)$ is an example to show that
   (a) addition of rational numbers is commutative.
   (b) rational numbers are closed under addition.
   (c) addition of rational number is associative.
   (d) rational numbers are distributive under addition.

6. Which of the following expressions shows that rational numbers are associative under multiplication.
   (a) $\dfrac{2}{3} \times \left(\dfrac{-6}{7} \times \dfrac{3}{5}\right) = \left(\dfrac{2}{3} \times \dfrac{-6}{7}\right) \times \dfrac{3}{5}$
   (b) $\dfrac{2}{3} \times \left(\dfrac{-6}{7} \times \dfrac{3}{5}\right) = \dfrac{2}{3} \times \left(\dfrac{3}{5} \times \dfrac{-6}{7}\right)$
   (c) $\dfrac{2}{3} \times \left(\dfrac{-6}{7} \times \dfrac{3}{5}\right) = \left(\dfrac{3}{5} \times \dfrac{2}{3}\right) \times \dfrac{-6}{7}$
   (d) $\left(\dfrac{2}{3} \times \dfrac{-6}{7}\right) \times \dfrac{3}{5} = \left(\dfrac{-6}{7} \times \dfrac{2}{3}\right) \times \dfrac{3}{5}$

7. Zero (0) is
   (a) the identity for addition of rational numbers.
   (b) the identity for subtraction of rational numbers.
   (c) the identity for multiplication of rational numbers.
   (d) the identity for division of rational numbers.

8. One (1) is

1. The record of a weather station shows that out of the past 250 consecutive days, its weather forecast were correct 175 times.

(i) What is the probability that on a given day it was correct?

(ii) What is the probability that it was not correct on a given day?

2. A die is thrown once. Find the probability of getting a prime number.

3. A coin is thrown once. Find the probability of getting a head.

4. From a group of 2 boys and 3 girls, we select a child. Find the probability of this child being a girl.

5. If we throw a die, then the upper face shows 1 or 2; or 3 or 4; or 5 or 6. Suppose we throw a die 150 times and get 2 for 75 times. What is the probability of getting a �2�?

6. A coin is tossed 200 times and is found tha ta tail comes up for 120 times. Find the probability of getting a tail.

7. If a coin is tossed for a certain number of times. How many times the coin was tossed, if the probability of getting a head is 0.4 and it appeared up for 24 times?

8. In a GK test a student was given 50 questions one by one. He gave the correct answer for 30 questions. Find the probability of giving correct answers.

9. Define a (i) Theorem (ii) Axiom and (iii)