



ARMY PUBLIC SCHOOL , CLEMENT TOWN

SUMMER BREAK HOMEWORK

(SESSION-2023-24)

CLASS – VIII

Guidelines for students:

1. Ensure timely submission of the given assignment after the school reopens. Remember, a well-presented holiday homework fetches you accolades.
2. Revise all the topics which have been taught by your subject teachers before summer break.
3. Books are companions for lifetime. Read good books, novels, short stories, etc. during the summer break.
4. Take up an activity at home that is joyful and excites you like sketching, painting, learning any musical instrument, gardening etc.

ENGLISH

Q1. Write a diary entry:

- (a) on your daily-basis activities during summer holidays. (At least thrice a week)
- (b) describing the moments when your mother had helped you on various occasions.(On weekends)

Q2. A list of books is recommended for you below. You must read the stories and write the summary in about 120-150 words on any two books. Also, make a short video as a book review on one of the below mentioned works:

1. Kabuliwala by Rabindranath Tagore
2. Children's Omnibus by Ruskin Bond
3. Malgudi Days by R.K. Narayan
4. The Adventures of Tom Sawyer by Mark Twain

Q3. Take any quote on “Gratitude and Empathy” and compile it using your artistic abilities.

Q4. Create a picto dictionary on 'Parts of speech'.

Q5. ASSIGNMENT WORK: Prepare a detailed biographical chart on any **Indian English writer from the Union Territory of Puducherry, also do a brief research on cultural significance of Aurobindo Ashram of same and summarize it in an A-4 Size sheet.**

हिंदी

- पांडिचेरी तथा उत्तराखंड के पर्यटन स्थलों के रंगीन चित्रों को काट कर चार्ट पेपर पर उनका कोलाज बनाइए तथा पर्यटन स्थलों के नाम भी लिखिए।
- वसंत पुस्तक से पाठ **पानी की कहानी** पढ़कर उस पर आधारित जलचक्र, चित्र सहित बनाइए तथा चित्र में रंग भरिए।
- हिंदी भाषा में प्रयोग होने वाले विभिन्न विराम चिह्नों को नाम के साथ लिखकर प्रत्येक का वाक्य में प्रयोग कीजिए।
- गर्मियों की छुट्टियों में आप किस जगह घूमने गए थे। उस स्थल का वर्णन करते हुए अपने मित्र को पत्र लिखिए। (अनौपचारिक)
- भारत की खोज पुस्तक से सिंधु घाटी सभ्यता पाठ को पढ़कर उसका सारांश अपने शब्दों में सुंदर और स्वच्छ लेख में लिखिए।

➤ प्रथम इकाई परीक्षा में आने वाले संपूर्ण पाठ्यक्रम को याद कीजिए।
(नोट –सम्पूर्ण लिखित कार्य एक अलग गत्ते की फाइल में करना है तथा फाइल को रंगीन कागज से कवर करके उस पर अपना नाम, कक्षा और सेक्शन भी लिखना है)

MATHEMATICS

ACTIVITY (In project File)

- Explain the following properties with the help of five examples of each:
 - a) Closure property for rational numbers
 - b) Commutative property for rational numbers
 - c) Associative property for rational numbers
- Explain different types of quadrilaterals and their properties with the help of figures using coloured paper.

CREATIVE CORNER (In Project File)

Art Integrated Project

- Make a pie chart of language distribution of Uttarakhand and Puducherry.(Data Handling)
- **Art Integrated Activity:**(Topic-Tessellation Art)-Make a tile design using different quadrilateral shapes on a white sheet of paper.

RECAPITULATION (In CBQ Notebook)

- Do MCQs and Case Study Questions of the following chapters .
 1. Rational Numbers
 2. Linear Equation in One Variable
 3. Understanding Quadrilaterals
- Revise Chapters-1,2,3 thoroughly.

MCQs and Case Study Questions

CHAPTER-1 RATIONAL NUMBERS

MCQs

Q1. What should be added to $-5/4$ to get -1 ?

- a. $-1/4$
- b. $1/4$
- c. 1
- d. $-3/4$

Q2. What should be subtracted from $-5/4$ to get -1 ?

- a. $-1/4$
- b. $1/4$

- c. 1
- d. $-3/4$

Q3. Which of the following is the additive inverse of $2/9$?

- a. $-2/9$
- b. $9/2$
- c. $1/9$
- d. $9/-2$

Q4. Which of the following is the multiplicative inverse for $-6/7$?

- a. $7/6$
- b. $-7/6$
- c. $1/6$
- d. $6/7$

Q5. Which of the following is neither a positive nor a negative rational number?

- a. 1
- b. 0
- c. Such a rational number doesn't exist
- d. None of these

Q6. Which of the following lies between 0 and -1?

- a. 0
- b. -3
- c. $-2/3$
- d. $4/3$

Q7. Which of the following is the reciprocal of a?

- a. a
- b. a
- c. $1/a$
- d. $-1/a$

Q8. Which of the following is the product of $7/8$ and $-4/21$?

- a. $-1/6$
- b. $1/12$
- c. $-16/63$
- d. $-147/16$

Q9. Which of the following is the product of $7/8$ and $4/21$?

- a. $1/6$
- b. 12
- c. $-63/16$
- d. $-16/147$

Q10. Which of the following is the reciprocal of the reciprocal of a rational number?

- a. -1
- b. 1
- c. 0
- d. The number itself

Q11. What should be subtracted from -342 to get -4?

- (a) 134
- (b) -134
- (c) -338
- (d) 413

Q12. Which of the following statements is true?

- (a) Natural numbers are closed under division.
- (b) Whole numbers are not closed under division.
- (c) Integers are closed under division.
- (d) Rational numbers are closed under division.

Q13. Which of the following statements is true?

- (a) Natural numbers are associative for division.
- (b) Whole numbers are associative for division.

- (c) Integers are associative for division.
- (d) Rational numbers are not associative for division

Q14 '0' is not a _____

- (a) a natural number.
- (b) a whole number.
- (c) an integer
- (d) a rational number

Q15 Which of the following is the multiplicative identity for rational numbers?

- (a) 1
- (b) -1
- (c) 0
- (d) None of these

Q16 The additive identity for rational numbers is _____.

- (a) 1
- (b) -1
- (c) 0
- (d) None of these

Q17. The additive inverse of $\frac{7}{11}$ is _____.

- (a) $-\frac{7}{11}$
- (b) $\frac{11}{7}$
- (c) $-\frac{11}{7}$
- (d) 1

Q18. The multiplicative inverse of -35 is _____.

- (a) $-\frac{1}{35}$
- (b) $-\frac{53}{1}$
- (c) $\frac{53}{1}$
- (d) $-\frac{7}{11}$

Q19. The rational number that does not have a reciprocal is _____.

- (a) 0
- (b) 1
- (c) -1
- (d) 12

Q20. Which of the following is the product of (-78) and (221) ?

- (a) 12657
- (b) -6316
- (c) -16147
- (d) -17238

Q21. What should be added to -34 to get -48 ?

- (a) 14
- (b) -14
- (c) 1
- (d) -34

Q22. What should be subtracted from -34 to get 0 ?

- (a) 14
- (b) -14
- (c) 1
- (d) -34

Q23. The multiplicative inverse of a number is also called its

Q24. The additive inverse of -34 is

Q25. The negative of a rational number is called its

CHAPTER-2 LINEAR EQUATION IN ONE VARIABLE

MCQs

Q1. Which of the following is not a linear equation in one variable?

- A. $33z+5 = 0$
- B. $33(x+y) = 0$
- C. $33x+5 = 0$
- D. $33y+5 = 0$

Q2. The solution of $2x-3=7$ is _____.

- A. 5
- B. 7
- C. 12
- D. 11

Q3. The solution of $2y + 9 = 4$ is _____.

- A. $9/2$
- B. $4/9$
- C. $-2/5$
- D. $-5/2$

Q4. The solution of $y/5 = 10$ is _____.

- A. 15
- B. 10
- C. 50

D. 5

Q5. What should be added to $-7/3$ to get $3/7$?

A. $21/58$

B. $58/21$

C. $47/21$

D. $50/21$

Q6. Three consecutive integers add up to 51. The integers are _____.

A. 16,17,18

B. 15,16,17

C. 17,18,19

D. 18,19,20

Q7. The solution for $3m = 5m - (8/5)$ is _____.

A. $8/5$

B. $4/5$

C. $5/4$

D. $4/3$

Q8. The degree of $x^2 - 5x + 2 = x^3$ is _____.

A. 3

B. 2

C. 1

D. 0

Q9. The degree of equation $x^2 - 9 = 2x^2$ is _____.

A. 0

B. 1

C. 2

D. 3

Q10. What is the value of x if $x + 9 = 12$?

A. 2

B. 3

C. 8

D. 6

Q11. If a number is divided by 8 it gives 6 as the value. Find the number.

A. 36

B. 42

- C. 48
- D. 56

Q12. Solve $2x + 9 = 4$.

- A. $x = 6$
- B. $x = -5/2$
- C. $x = -3/2$
- D. $x = -9/2$

Q13. Find the value of x if $2x + 10 = 76$.

- A. 33
- B. 7.6
- C. 66
- D. 32

Q14. If x is an even number, then the next even number is:

- A. $x+1$
- B. $x+2$
- C. $x+3$
- D. $x+4$

Q15. When a number is added to itself, it becomes 24. What is the number?

- A. 2
- B. 4
- C. 12
- D. 21

Q16. The perimeter of a rectangle is 40 cm. If its width is 10 cm, then find the length.

- A. 10
- B. 20
- C. 30
- D. 40

Q17. What do we get when we transpose $5/2$ to RHS in the equation $x/4 + 5/2 = -3/3$?

- I. $x/4 = -3/4 + 5/2$
- II. $x/4 = -5/2 + 3/4$
- III. $x/4 = -3/4 + (-5/2)$
- IV. none of these

Q18. In the equation $3x = 4 - x$, transposing $-x$ to LHS we get _____.

- I. $3x - x = 4$
- II. $3x + x = 4$
- III. $-3x + x = 4$
- IV. $-3x - x = 4$

Q19. If $x/3 + 1 = 7/15$, then which of the following is correct?

- I. $x/3 = 7/15 - 1$
- II. $x/3 = -7/15 + 1$
- III. $x/3 = -7/15 - 1$
- IV. none of these

Q20. If $7x+15 = 50$, then which of the following is the root of the equation?

- I. -5
- II. $65/7$
- III. 5

IV. $1/5$

Q21. If $2x/5 = 4$, the value of x is _____.

- I. 10
- II. -10
- III. $-8/5$
- IV. $8/5$

Q22. If the sum of two consecutive numbers is 71 and one number is x , then the other number is _____.

- I. $x + (x+1) = 71$
- II. $x + (x+2) = 71$
- III. $x + x = 71$
- IV. none of these

Q23. Two years ago my age was x years, then what was my age 5 years ago?

- I. $X + 7$
- II. $X - 2 - 5$
- III. $X - 5$
- IV. $X - 3$

Q24. How old will I be after 10 years, if my age before 10 years was ' x ' years?

- I. $X + 20$
- II. $X - 20$
- III. $X + 10$
- IV. $X - 10$

Q25. If x is an odd number, what is its next odd number?

- I. $2x$
- II. $2x + 1$
- III. $x + 2$
- IV. $x + 1$

CHAPTER 3- UNDERSTANDING QUADRILATERALS

MCQs

1. Gagan draws a quadrilateral with equal diagonals. What additional information is required to conclude that the quadrilateral drawn is a square?
 - a) Diagonals are perpendicular to each other.
 - b) Diagonals meet at 60°
 - c) Diagonals meet at 70°
 - d) Diagonals meet at 80°
2. Rajat constructs a parallelogram ABCD. Which is not true for the figure drawn by him?
 - a) $\angle A = \angle C$
 - b) $AB = CD$
 - c) $\angle B = \angle C$
 - d) $AD = BC$
3. Which of these statements is true for a square?
 - a) A rectangle with equal length and breadth.
 - b) A rectangle with diagonals of different length.
 - c) A rectangle with 2 acute and 2 obtuse angles .
 - d) A rectangle with adjacent angles complementary.
4. Which of these is a parallelogram?
 - a) Kite
 - b) Pentagon
 - c) Rhombus
 - d) Hexagon
5. What is the sum of all exterior angles of a pentagon?
 - a) 270°

- b) 180°
 - c) 360°
 - d) 450°
6. Which of these is a regular quadrilateral?
- a) Kite
 - b) Trapezium
 - c) Rhombus
 - d) Square
7. What is the sum of adjacent angles of a rhombus?
- a) 270°
 - b) 180°
 - c) 360°
 - d) 450°
8. What is the number of sides of a regular polygon of each exterior angle is 36° ?
- a) 36
 - b) 10
 - c) 20
 - d) 18
9. In which of these quadrilaterals, all angles are 90° ?
- a) Rhombus
 - b) Kite
 - c) Square
 - d) Parallelogram
10. Name the quadrilateral in which a pair of opposite sides is parallel?
- a) Rhombus
 - b) Kite
 - c) Square
 - d) Trapezium
11. What is the sum of all exterior angles of a hexagon?
- a) 270°
 - b) 180°
 - c) 360°
 - d) 450°
12. What is the number of sides of a regular polygon of each exterior angle is 90° ?
- a) 4
 - b) 5
 - c) 6
 - d) 7
13. What is the sum of interior and exterior angle of a polygon?
- a) 270°
 - b) 180°
 - c) 360°
 - d) 450°
14. What is the sum of all the angles of a quadrilateral?
- a) 270°
 - b) 180°
 - c) 360°
 - d) 450°
15. Which of the following is not the property of a rhombus?
- a) All sides are equal
 - b) Diagonals are equal
 - c) Diagonals bisect each other at 90° .
 - d) Adjacent angles are supplementary.
16. The two adjacent angles of a parallelogram are in the ratio 3:2. What is the measure of the greater angle?
- a) 27°
 - b) 108°

- c) 72°
- d) 54°

17. What is the sum of co-interior angles?

- a) 270°
- b) 180°
- c) 360°
- d) 450°

18. Which of the following is true for the adjacent angles of a parallelogram?

- a) They are equal to each other
- b) They are complementary angles
- c) They are supplementary angles.
- d) All of these

19. How many diagonals are there in a quadrilateral?

- a) 2
- b) 3
- c) 4
- d) 5

20. A simple closed curve made up of only line segments is called a

- a) Circle
- b) Polygon
- c) Line segment
- d) Semi-Circle

21. The quadrilateral in which only a pair of opposite angles are equal is_____.

- a) Kite
- b) Rhombus
- c) Trapezium
- d) Square

22. The diagonals of a rhombus measure 6 cm and 8 cm. What is the measure of its side?

- a) 5 cm
- b) 6 cm
- c) 8 cm
- d) 4 cm

23. The diagonals of a rectangle measure 10 cm and breadth measure 6 cm. What is the measure of its length?

- a) 5 cm
- b) 6 cm
- c) 8 cm
- d) 4 cm

24. The opposite angles of a parallelogram are _____.

- a) Equal
- b) Unequal
- c) Supplementary
- d) Complementary

25. The opposite sides of a parallelogram are 8 cm and $2y$. Find y .

- a) 4
- b) 5
- c) 6
- d) 3

CASE-STUDY QUESTIONS
CHAPTER-I
RATIONAL NUMBERS

Q1. Raj donated $\frac{2}{3}$ rd of his salary to an NGO for the education of girls, his wife donated $\frac{2}{3}$ rd of her salary to the NGO on purchasing food items for the girls.

Salary of Raj is ₹ 42000 and his wife salary is ₹ 24000



Answer the following questions:

- Write the amount donated by Raj.
- Write the amount donated by Raj's wife.
- Which property will be used to find total amount of donation by Raj and his wife?
- The product of two rational numbers is a _____.

Q2. Ram and Sita played a game based on Magic Square to improve logical thinking. The magic square made by them is given below.

$\frac{4}{11}$	$\frac{9}{11}$	$\frac{2}{11}$
$\frac{3}{11}$	$\frac{5}{11}$	$\frac{7}{11}$
$\frac{8}{11}$	$\frac{1}{11}$	$\frac{6}{11}$

Answer the following questions:

- What is the sum of any two rational numbers?
- What is the sum of the rational numbers in each row?
- What is the sum of the rational numbers in each column?
- What is the sum of the rational numbers diagonally?
- $a + (b + c) = (a + b) + c$ for the rational numbers.

The property written above is _____.

CHAPTER-II
LINEAR EQUATIONS IN ONE VARIABLE

Q1 Ram has a saving account in State Bank of India . He deposited ₹ 2000 in the bank. He told Seema that he deposited $x + 5$ notes of ₹ 100. Seema wants to know the value of x . She formulated a linear equation of $(x+5) \times 100 = 2000$ for this.



Answer the following questions:

- i) What is the degree of a linear equation?
- ii) How many solutions does a linear equation in one variable have?
- iii) What is the value of x ?

iv) How many notes of ₹ 100 were deposited?

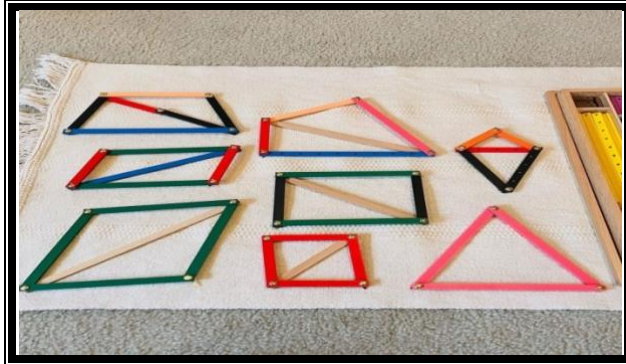
Q2 The perimeter of a rectangular garden is 200m. Its length is 60m and its breadth is b units. To find the breadth, the owner formulated an equation of $2(60+b) = 200$. Answer the following questions:



- i) What is the formula of perimeter of a rectangle?
- ii) Find the value of b .
- iii) Find the area of the garden.
- iv) If $a + 56 = 2a - 6$, find a .

CHAPTER-III UNDERSTANDING QUADRILATERALS

Q1 During Mathematics Lab activity, a teacher gave two sticks of 6 cm each and two sticks of 4 cm each to Sonu to make different types of polygons. Sonu made two quadrilaterals.



Answer the following questions:-

- 1) How many sides are there in a quadrilateral?
- 2) Which quadrilaterals were formed by Sonu?

- 3) Write any two properties of a kite.
- 4) Opposite sides of a parallelogram are _____.

Q2 Raj made a poster in the form of a square on the topic 'Save Earth'.

Answer the following questions;

- 1) If the length of its side is 6 cm, what is the measure of its diagonal?
- 2) The diagonals of a square intersect at ___ angle.
- 3) Write three properties of a square.
- 4) All angles of a square are _____.



SCIENCE

1. Do a comparative study of flora and fauna of UTTARAKHAND and PUDUCHERRY. Make notes in a project file and paste related pictures also.
2. Take a piece of bread. Moisten it and leave for three to four days. After four days, observe the bread for any change. Take the photograph and paste it in project file OR make PPT on this activity.
3. **Art Integrated Project** - Make a model on Viruses and Protozoa using materials available at home.
4. Collect pictures of agricultural machine and paste them in a file. Write their names and uses.
5. Frame thirty MCQs from chapters 1, 2 and 3 (ten from each chapter) and write them in your subject notebook.
6. Revise question - answers and exercises done in class.

SOCIAL SCIENCE

1. Do a **comparative study** of Uttarakhand and Puducherry on **any one topic** given below:

- A. Monuments
- B. Dance Forms

Use A4 size plain sheets. Paste pictures.

2. **Art Integrated Project:** Make an eco- friendly model on **any one** of the soil conservation methods given below-

- Mulching
- Terrace Farming
- Shelter Belt
- Rock Dams
- Contour Barriers

(Do not use plastic or thermocol)

Reuse waste material for making the project

(Refer Chapter 2- Land, Soil, Water, Natural Vegetation and Wildlife in Geography)

3. Frame **10 MCQs** from **any two chapters** completed in class. Write them in respective subject notebook
4. Revise questions answers and exercises done in class.

RUBRICS OF PROJECT.

S No	TOPICS	MARKS
1.	Research Work	01
2.	Content	01
3.	Creativity	02
4.	Presentation and collaboration	01

5.	Total marks	05
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IMPORTANT INSTRUCTIONS

1. Begin the project with an acknowledgement, followed by the goals.
2. Write the topic and sub-topic of the project.
3. Include your name, class with section in a tidy box.
4. Compile your project in a creative way.

SANSKRIT

- 1- संस्कृत में कोई पाँच श्लोक तथा उनका हिन्दी अनुवाद आकर्षक ढंग से लिखिए।संबंधित चित्र भी चिपकाइए।
- 2- वर्तमान समय में वस्तुओं की कीमत चुकाने के लिए जो एप्स प्रयोग किए जाते हैं, उनके विषय में जानकारी एकत्र कीजिए।संबंधित चित्र भी चिपकाइए।
- 3- 'सदैव पुरतो निदेहि चरणं' गीत को गाते हुए एक वीडियो बनाइए।
- 4- 'बिलस्य वाणी न कदापि मे श्रुता' तथा 'डिजी भारत' पाठ का सारांश अपने शब्दों में लिखिए।
- 5- पाठ-1,2,3,4 से संबंधित अभ्यास कार्य को संस्कृत की कार्य-पुस्तिका में हल कीजिए।
- 6- उत्तराखंड तथा पांडिचेरी के पाँच-पाँच तीर्थ स्थलों के नाम संस्कृत में लिखिए।संबंधित चित्र भी चिपकाइए।

नोट- प्रश्न संख्या 1 ,2 तथा 4 एक पतली कॉपी में करें। प्रश्न संख्या 6 को स्कैप बुक में करें।

COMPUTER SCIENCE

1. Do a comparative study on different **network topologies (Bus, Ring, Star)** and then create a Chart (on Chart Paper) of the advantages & disadvantages of each one and also provide examples of networks that use each topology.
2. Using your creativity, create a chart (in Computer Science notebook only)on the different types of networks based on geographical area, such as **LAN, MAN, WAN,PAN** which shows the **differences between them** and write the examples of each type of network.
3. You have **six network protocols** in chapter 1. Do research on **any two protocols** and explain how that protocol works and what are its main features?
4. Create a simple GUI interface using **Tkinter Library** in Python using basic **widgets** such as **Buttons, Labels, Entry, Radio Button and Check Button** to build a form as shown below.
Also, use the layout management methods such as **Grid, Pack or Place** to **organize** the widgets on the screen.

5. Read Chapters 1 and 9 and learn the exercises for upcoming assessments.

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