

KENDRIYA VIDYALAYA SITAPUR (FIRST SHIFT)
PERIODIC TEST-1 (2023-24)

SUBJECT: MATHEMATICS
CLASS: VIII

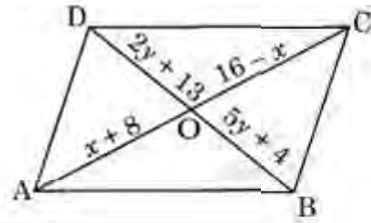
MAX. MARKS: 40
DURATION: 1½HRS

General Instructions:

- All questions are compulsory.
- **Section A** comprises of **10 MCQs** of **1 mark** each.
- **Section B** comprises of 5 questions of **2 marks** each and 2 questions of **3 marks** each.
- **Section C** comprises of 2 questions of **5 marks** each.
- **Section D** comprises of 3 case based questions of **4 marks** each.

Q.No.	SECTION-A	MARKS
	Choose the correct option in each of the following questions (Q1 to Q10):-	
1	The reciprocal of -1 is.... a) -1 b) 0 c) 1 d) 2	1
2	The additive inverse of $-\frac{5}{7}$ is a) 1 b) $-\frac{5}{7}$ c) 0 d) $\frac{5}{7}$	1
3	The product of two rational numbers is always a___. a) Whole number b) natural number c) integer d) rational number	1
4	What is the value of x in the following equation: $\frac{2x}{3} = 18$ a) 27 b) 12 c) 9 d) none of these	1
5	If $6 = z + 2$ then value of z will be ____ a) 16 b) -4 c) 4 d) 3	1
6	The opposite angles of a parallelogram are ____ a) Supplementary b) Equal c) Complementary d) None of these	1
7	The sum of all interior angles of a quadrilateral is ____ a) 180 b) 90 c) 360 d) 540	1
8	A polygon with minimum number of sides is a) Pentagon b) Square c) Triangle d) Angle	1
9	How many diagonals do a convex quadrilateral has? a) one b) two c) three d) four	1
10	If the diagonals of a quadrilateral bisect each other at right angles, it will be a a) rhombus b) trapezium c) rectangle d) kite	1
	SECTION-B	
11	Name the property under multiplication used in each of the following (i) $\frac{-4}{5} \times 1 = 1 \times \frac{-4}{5} = \frac{-4}{5}$ (ii) $\frac{-19}{29} \times \frac{29}{-19} = 1$	2
12	Find the measure of each exterior angle of a regular polygon with 15 sides	2
13	Find: $\frac{3}{7} \times \left(\frac{-4}{5}\right) \times \left(\frac{-14}{9}\right) \times \left(\frac{15}{16}\right)$	2

14	If $\frac{5x}{3} - 4 = \frac{2x}{5}$ then find the value of $2x - 7$.	2
15	Find the probability of getting a prime number when a die is rolled once	2
16	Find: $\frac{3}{7} + \left(\frac{5}{22}\right)$	3
17	Find the values of x and y in the following parallelogram	3



SECTION-C

18	Draw a pie chart showing the following information. The table shows the colors preferred by a group of people	5
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Colors	Blue	Green	Red	Yellow	Total
Number of people	18	9	6	3	36

19	Solve the following linear equation and check the result: $x+7 - \frac{8x}{3} = \frac{17}{6} - \frac{5x}{2}$	5
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SECTION-D

CASE BASED

20	<p>Data is represented graphically to give a clear idea of what it represents. A bar graph represents the information using bars of uniform width, their heights being proportional to the respective values. Study the graph and answer the following:</p> <p>(i) What is the information given by the bar graph?</p> <p>(ii) In which year is the increase in the number of students maximum?</p> <p>(iii) In which year is the number of students maximum?</p> <p>(iv) State whether true or false: 'The number of students during 2005-06 is twice that of 2003-04.'</p>	1x4=4
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