

KENDRIYA VIDYALAYA BACHELI



SUBJECT-MATHS

CLASS-VI

SUMMER VACATION HOLYDAY HOMEWORK

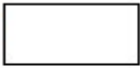
- TOPICS: - i) Divisibility criteria.
ii) Perimeter and area of the triangle.
iii) LCM and HCF.
iv) Triangles and its properties
v) Factors and Multiples
vi) Quadrilaterals and types of quadrilaterals
vii) Fractions
ix) Prime numbers

Note:- Section-A contains 31 MCQs, Section-B contains 31 questions & Section -C Activity base Questions.

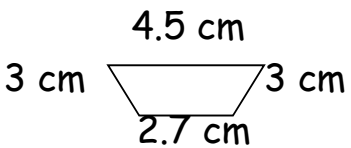
- Instructions: - a) Do the work neatly in your homework notebook.
b) Complete your work with full steps and clear handwriting.

Section - A	
1.	Which of the following is divisible by 4? a) 76281 b) 62838 c) 652312 d) 283913
2.	The perimeter of an equilateral triangle whose side 6 cm is: a) 18 cm b) 16 cm c) 20 cm d) 24 cm
3.	The L.C.M. of 20 and 15 is: a) 5 b) 30 c) 60 d) 100
4.	If two sides of a triangle are equal then the triangle is a) Equilateral b) Isosceles c) Right d) Acute
5.	Which one is the factor of 28? a) 7 b) 3 c) 11 d) 9
6.	The number on missing place is: $13 \times \underline{\hspace{2cm}} = 91$ a) 6 b) 8 c) 7 d) 3

7.	The quadrilateral in which all sides are equal is called ? a) Rectangle b) Rhombus c) Kite d) Trapezium
8.	Which one is the multiple of 9? a) 26 b) 81 c) 42 d) 56
9.	The H.C.F. of 24 and 18 is ? a) 36 b) 18 c) 6 d) 48
10.	The minimum value of y for which the number 231y4 is divisible by 9 is? a) 5 b) 8 c) 2 d) 4
11.	The common factor of 28 and 20 is (a) 3 (b) 7 (c) 4 (d) 5
12.	The fraction representing the shaded portion <div style="text-align: center;">  </div> (a) $\frac{1}{4}$ (b) $\frac{3}{4}$ (c) $\frac{1}{2}$ (d) $\frac{1}{8}$
13.	What is perimeter of a rectangle = a) Length $\times$ Breadth (c) $2 \times (\text{Length} \times \text{Breadth})$ b) Lenth + breadth d) $2 \times (\text{Length} + \text{Breadth})$
14.	The LCM of 24 and 36 is (a) 8 b) 72 c) 12 d) 10
15.	What fraction of Rs 1 is 75 paise? (a) $\frac{1}{2}$ (b) $\frac{1}{4}$ (c) $\frac{1}{8}$ (d) $\frac{1}{10}$
16.	Two sides of a triangle are 4 cm and 3 cm. The perimeter of the triangle is 12 cm. The third side has length (a) 3.5 cm (b) 5 cm (c) 3 cm (d) 6 cm
17.	The mixed fraction of $\frac{9}{4}$ is (a) $2\frac{1}{4}$ (b) $3\frac{1}{4}$ (c) $4\frac{1}{4}$ (d) $5\frac{1}{4}$
18.	The perimeter of a rectangular piece of cardboard is 6 m. Its breadth is 1 m. Find its length. (a) 1 m (b) 2 m (c) 3 m (d) 6 m
19.	Which of the following are co-primes?

	(a) 8 , 10	(b) 9 , 10	(c) 6 , 8	(d) 15 , 18
20.	$\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = ?$ (a) 1 (b) 2 (c) 4 (d) 8			
21.	The number with unit digit 0 or 5 is divisible by: (a) 2 (b) 3 (c) 4 (d) 5			
22.	The number with unit digit 0 is divisible by: (a) 5 (b) 10 (c) 15 (d) 2			
23.	The sequence of numbers 2, 4, 6, 8,... is known as a) Counting numbers b) Odd numbers c) Square numbers d) Even numbers			
24.	Which of the following is divisible by 6? a) 76281 b) 62838 c) 652312 d) 283913			
25.	The adjacent figure shows an example of a) Line AB b) Line segment AB c) Angle AB d) Ray AB			
26.	What comes next in the given sequence: 2, 4, 8, 16, ____, ____, ____. a) 18, 20, 24 b) 20, 24, 28 c) 32, 64, 128 d) 32, 64, 96			
27.	What comes next in the given sequence of shapes: <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> a)  c)  </div> <div style="text-align: center;"> b)  d)  </div> <div style="border: 1px solid black; padding: 10px; display: flex; align-items: center; gap: 10px;">    </div> </div>			
28.	Which one is the factor of 28? a) 7 b) 3 c) 11 d) 9			
29.	The vertex of the angle $\angle PQR$, is a) Point P b) Point Q c) Point R d) None of these			

30.	The triangle in which exactly two sides are equal, is called ? a) Right triangle b) Isosceles triangle c) Equilateral triangle d) None of these
31.	"The tip of a compass" is an example of a) line b) point c) ray d) line segment
Section - B	
1.	State whether the given statement is TRUE or FALSE: (i) The ray has one starting point. (ii) The next number to the sequence 32, 35, 38, 41,... is 43.
2.	What are the first three common multiples of 4 and 8?
3.	Express $\frac{13}{6}$ as a mixed fraction.
4.	Find the missing terms: Perimeter of a rectangle = 16 cm ; breadth = 2 cm ; length = ?
5.	Choose all prime numbers: 12 19 7 8 9 11 15 13 24 27 23 34 37 36
6.	Express the following fraction in lowest terms: (a) $\frac{17}{51}$ (b) $\frac{126}{147}$
7.	Find the missing terms ; Perimeter of a square = 20 cm ; side of a square = ?
8.	Write the largest 4 digit number and gives its prime factorization
9.	How many whole units are there in $\frac{7}{4}$ and in $\frac{13}{3}$.

10.	Write the following mixed fractions as fractions: (a) $3\frac{1}{5}$ (b) $5\frac{2}{3}$
11.	The perimeter of the adjoining figure is? <div style="text-align: right; margin-right: 50px;">  </div>
12.	Find the perimeter of a square with side 4 cm .
13.	Without actual division check whether the first number is divisible by second number or not?

	394683 ; 9											
14.	Find the L.C.M. of 12 and 16.											
15.	Find the H.C.F. of 25 and 40 ?											
16.	Find the area of a rectangle whose length and breadth are 9 cm and 6cm.											
17.	Find the common factors of	a) 20 and 28	b) 35 and 50									
18.	Find A, B, C: <div style="display: flex; justify-content: space-around; align-items: flex-end;"><div style="text-align: center;">a) $\begin{array}{r} A \quad 4 \\ + 5 \quad B \\ \hline 9 \quad 1 \end{array}$</div><div style="text-align: center;">b) $\begin{array}{r} 4 \quad 7 \quad A \\ + 2 \quad B \quad 8 \\ \hline 7 \quad 1 \quad 2 \end{array}$</div></div>											
19.	Find the side of square whose perimeter is 20 m											
20.	Categorize prime numbers and composite numbers from the given numbers: 16, 11, 8, 3, 13, 12, 7, 2, 10, 24, 17, 19											
21.	Write first five multiples of :	i) 5	ii) 8									
22.	Complete the given magic square. <table border="1" style="margin: 10px auto; border-collapse: collapse; text-align: center;"><tr><td style="padding: 5px;">6</td><td style="padding: 5px;"></td><td style="padding: 5px;">10</td></tr><tr><td style="padding: 5px;">11</td><td style="padding: 5px;"></td><td style="padding: 5px;"></td></tr><tr><td style="padding: 5px;"></td><td style="padding: 5px;">9</td><td style="padding: 5px;"></td></tr></table> <p style="text-align: center;">Magic number = 21</p>			6		10	11				9	
6		10										
11												
	9											
23.	Find the side of square whose area is 100 m ² .											
24.	Write first five multiples of :	i) 5	ii) 8									
25.	Write the given numbers in words:	i) 297162	ii) 68192									
26.	Write 3 equivalent fractions of:	(a) $\frac{2}{5}$	(b) $\frac{3}{7}$									
27.	What special name is given to the following number sequence: (i) 1, 3, 5, 7, 9, 11, 13, 15, ... (ii) 1, 3, 6, 10, 15, 21, 28, ... (iii) 1, 2, 3, 5, 8, 13, 21, ... (iv) 1, 4, 9, 16, 25, ...											
28.	i) Write first five multiples of 5. ii) Write the name of triangle in which one angle is 90°. iii) Write the divisibility rule of 6. iv) Find the L.C.M. of 7 and 10.											
29.	Do as directed: (i) Degree measure of a straight angle is _____. (ii) A line segment has _____ end point(s).											

	<p>(iii) Which angle is greater in size, an acute angle or an obtuse angle? _____.</p> <p>(iv) In straight angle $\angle AOB$, ray OA is opposite to ray _____.</p>
30.	<div data-bbox="232 384 1045 583"> </div> <p>a) In above fig. K2 has 1 line segment, now answer the following: K3 - _____, K4 - _____, K5- _____</p> <p>(b) Write the name of the figure K3, K4 and K5.</p>
31.	<p>Observe the pattern:</p> $1 = 1$ $1 + 2 + 1 = 4$ $1 + 2 + 3 + 2 + 1 = 9$ $1 + 2 + 3 + 4 + 3 + 2 + 1 = 16$ <p>.....</p> <p>.....</p> <p>Based on the above pattern, answer the following question:</p> <p>(i) $1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 7 + 6 + 5 + 4 + 3 + 2 + 1 =$</p> <p>(ii) $1 + 2 + 3 + 4 + \dots + 19 + 20 + 19 + \dots + 4 + 3 + 2 + 1 =$</p> <p>(iii) $1 + 2 + 3 + 4 + \dots + 99 + 100 + 99 + \dots + 4 + 3 + 2 + 1 =$</p>
SEC-C	
	<p>ACTIVITIES:</p> <p>I) Solve at least 5 riddles/puzzles/brain teasers from a puzzle book.</p> <p>II) Write at least 5 real-life situations where you saw mathematics being used(e.g., shopping, time management, measurements</p> <p>III) Prepare a neat & clean chart (FULL SIZE) from the following topics: (Prepare only one) INTEZERS, Different types of triangles,</p> <p>IV) Learn multiplication tables from 2 to 20 and write it 3 times in your</p>

Class-7th	Kendriya Vidyalaya Bacheli Summer Vacation Homework
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Topics:

- i) Square numbers, Prime factorization
- ii) Algebraic expressions(constant & variables, terms & factors, like & unlike terms, coefficients, formation of algebraic expressions)
- iii) Statistics(Arithmetic mean/average, Median, Mode & Range of given set of data)
- iv) Set up of an algebraic equation
- v) Lines & angles: Complementary angles, Supplementary angles etc.
- vi) The Triangles & its properties
- vii) Fractions & Decimals

Note: Section-A contains **40 MCQs**, Section-B contains **30 VSA** type questions and Section-C contains various activities.

Instructions: a) Do the work neatly in your homework notebook.
b) Complete your work with full steps and clear handwriting.

Q.N.	SEC-A (MCQ)
1	Write $3 \times y \times y \times y \times z \times z \times z \times z$ in simplest/compact form: a) $3y^2z^5$ b) $2y^3z^4$ c) $3y^3z^4$ d) none of these
2	Which of the following number is a square number? a) 23 b) 81 c) 48 d) 63
3	The average of first five multiples of 3 is a) 45 b) 9 c) 50 d) 7
4	The algebraic equation of the given statement is "three time y plus 10 gives 22" a) $3y + 10 = 22$ b) $3y + 12 = 21$ c) $2y + 1 = 22$ d) $3y + 2 = 23$
5	Write the algebraic expressions for the following statement: "Numbers x and y both squared and added" a) $(x + y)^2$ b) $x^2 + y$ c) $x^2 + y^2$ d) $x + y^2$
6	The median of 6, 2, 8, 3, 7, 1, 5 is a) 3 b) 5 c) 6 d) 7
7	The smallest 2-digit square number is a) 25 b) 16 c) 9 d) 81
8	The statement form of the algebraic expression " $3x + 4$ " is a) three times x is subtracted from four b) three times x is added to two c) three times x is added to seven d) none of these
9	The mode of the data 1, 3, 5, 3, 3, 5, 1, 1, 1, 5 is a) 3 b) 1 c) 5 d) none of these
10	Which of the following is an improper fraction? a) $\frac{7}{10}$ b) $\frac{9}{7}$ c) $\frac{7}{9}$ d) none of these
11	Which one is a square number between 60 and 70? a) 65 b) 69 c) 64 d) 70

12	Identify the pair of like terms: a) $(2x^2, 3x)$ b) $(3xy, 2xy^2)$ c) $(-2xy, 4x^2y^2)$ d) $(3x^2y, -2x^2y)$
13	The range of the data 2, 5, 2, 8, 4, 3, 1, 3, 6 is a) 6 b) 8 c) 1 d) 7
14	The prime factorization of 196 in exponential form is a) $2^2 \times 7$ b) $2^3 \times 3$ c) $2^2 \times 7^2$ d) $2^2 \times 5$
15	The coefficient of y in $4x - 3y^2$ is a) $4x$ b) -3 c) 3 d) -3y
16	Which of the following is a solution of $3x + 2 = 14$. a) $x = -2$ b) $x = 4$ c) $x = 5$ d) $x = 2$
17	The sum of the lowest 1-digit square number and the lowest 2-digit square number is a) 10 b) 82 c) 100 d) 23
18	"VARIABLE" means which can a) take only one value b) take only two values c) take only three values d) take any value
19	The range of the data 3, 3, 3, 3, 3, 3, 3 is a) 3 b) 0 c) can't be determined d) none of these
20	A binary expression is that expression which contains a) 2 terms b) 2 unlike terms c) 3 unlike terms d) 3 terms
21	The arithmetic mean of 2, 4, 1, 3, 5, 4, 2 is a) 4 b) 3 c) 7 d) 21
22	$36 \div \frac{1}{4} = ?$ a) 9 b) $\frac{1}{9}$ c) $\frac{1}{144}$ d) 144
23	The key components while forming algebraic expressions are a) constants & variables b) constants, variables & binary operations c) constants & binary operations d) variables & binary operations
24	The solution of the equation " $2x - 4 = 10$ " is a) 6 b) 5 c) 8 d) 7
25	The arithmetic mean of first five whole numbers is a) 3 b) 2 c) 3.5 d) 2.5
26	The number of terms in the expression $3x^2 + 4y + 7$ are a) 2 b) 3 c) 4 d) 7
27	$2.32 + 5.17 = ?$ a) 7.59 b) 6.49 c) 7.49 d) 10.49
28	If two angles are supplementary, then the sum of their measures is ____. a) 90° b) 45° c) 60° d) 180°
29	The mode of the data 2, 2, 2, 2, 2, 2, 2 is a) 3 b) 4 c) 2 d) 5
30	Write the equation for the following statement: "Seven times m plus 7 gets you 77."

	a) $m + 7 = 77$ b) $8m + 7 = 77$ c) $7m + 7 = 77$ d) $7m - 7 = 77$
31	The Triangle in which all sides are equal is called? a) Isosceles triangle b) Equilateral triangle c) Acute triangle d) Right triangle
32	If two angles of a triangle are 30° and 65° , then the measure of third angle is a) 75° b) 85° c) 95° d) none of these
33	Which one of the following is the correct order ? a) Line, Point, Line segment, Plane, Ray b) Point, Line segment, Line, Ray, Plane c) Line segment, Point, Ray, Plane, Line d) None of these
34	$131.6 \div 10 = ?$ a) 1316 b) 131.6 c) 13.16 d) 0.1316
35	Identify which of the following pairs of angles are complementary: a) $(65^\circ, 115^\circ)$ b) $(80^\circ, 10^\circ)$ c) $(130^\circ, 50^\circ)$ d) $(45^\circ, 23^\circ)$
36	The longest side of a right triangle is called a) base b) perpendicular c) hypotenuse d) none of these
37	A ray has exactly _____ end point(s). a) 2 b) 3 c) 1 d) no end point
38	Which of the following is an example of "PLANE"? a) Tip of a needle b) Sun Ray c) Table-top d) none of these
39	The base & exponent of 4^6 is a) 6, 4 b) 4, 7 c) 6, 7 d) 4, 6
40	$16.32 - 9.75 = ?$ a) 5.57 b) 6.47 c) 6.57 d) 5.57
Q.N.	SEC-B
1	Find the mode of the given data: 2, 3, 2, 5, 2, 3, 4, 6, 2, 2.
2	Write all square numbers between 1 to 50.
3	Define the term "VARIABLE".
4	Find the median of: 3, 11, 7, 2, 5, 9, 9, 2, 10.
5	Give the example of the following: i) Point ii) Line segment iii) Plane iv) Ray
6	If one of the supplementary angle is 145° , then find the other angle.
7	Find the mode of: 28, 34, 32, 41, 36, 32, 32, 38, 32, 40, 31.
8	Write the prime factorisation of 432 in exponential form.
9	Group the like terms, unlike terms and constants. $2ab, 3xy, 4, 3ba, xy^2, 2x^2, xy, 5, 3x^2$
10	Find the median of the given data: 8, 5, 9, 2, 4, 6, 7.
11	Answer the following questions: i) Find the largest 2-digit square number. ii) Find the smallest 3-digit square number.

	iii) Find the 2-digit square number which is divisible by 5. iv) Find a square number less than 100.
12	Draw the shapes of the following triangles: i) An isosceles triangle ii) A right angled triangle iii) An obtuse triangle
13	If one of the complementary angle is 47° , then find the other angle.
14	Write the terms and factors of the following algebraic expressions: i) $2x^3 + 3xy^2 - 5$ ii) $4xy^2 - 3x^2 + 6y$ iii) $-2x^2 + 3y^2 + 3x$
15	Find the arithmetic mean of first 6 odd natural numbers.
16	Write the base and exponent of the following numbers: i) 5^4 ii) 2^6 iii) 7^2 iv) 9^8
17	Write at least one property of the following triangle: i) An equilateral triangle ii) Scalene triangle
18	Write the algebraic equation from the given statement: i) Ten is subtracted from two times y gives 50. ii) Two times x added to 5 gives 11. iii) Three is added to five times x gives 13
19	If two angles of a triangle are 65° and 45° , then find the measure of third angle.
20	Find the arithmetic mean of first five prime numbers.
21	Write the vertex and arms of following angles: i) $\angle ABC$ ii) $\angle PQR$ iii) $\angle XYZ$
22	What are the coefficients of x in the following expressions? $4x - 3y$, $8 - x + y$, $y^2x - y$, $2z - 5xz$
23	Classify the following algebraic expressions as monomial, binomial, trinomial: i) $3x^3 + 4xy$ ii) $2xy^2 - 3y^2x + 5$ iii) $5xy$ iv) $2x^2 - 3x^2y$
24	Find the sum: i) $\frac{3}{5} + \frac{5}{4}$ ii) $\frac{3}{7} + \frac{4}{3}$ iii) $\frac{6}{5} + \frac{7}{2}$
25	Find the range of: 13, 18, 12, 24, 28, 19. 28, 15, 12.
26	Find the prime factorisation of the following numbers in exponential form: i) 120 ii) 252 iii) 432
27	Find the sum of following decimal numbers: i) $13.42 + 16.21$ ii) $24.29 + 1.32$ iii) $37.23 + 23.45$
28	Write the following in statement form: i) $2m = 8$ ii) $4p - 2 = 18$ iii) $3p + 4 = 25$
29	Convert the following into a mixed fraction: i) $\frac{38}{7}$ ii) $\frac{29}{4}$ iii) $\frac{77}{8}$
30	Write equations for the following statements: i) If you take away 6 from 6 times y, you get 60. ii) The sum of three times x and 11 is 32. iii) 2 subtracted from y is 8. iv) If you add 5 to 3 times y, you get 15.

	<p>v) Sum of x and 3 is 6.</p> <p>vi) Three-fourth of y added to 3 gives 12.</p>
	SEC-C
	<p><u>ACTIVITIES:</u></p> <p>I) Solve at least 5 riddles/puzzles/brain teasers from a puzzle book.</p> <p>II) Write at least 5 real-life situations where you saw mathematics being used(e.g., shopping, time management, measurements)</p> <p>III) Prepare a neat & clean chart (FULL SIZE) from the following topics: (P Prepare only one)</p> <p>INTEZERS, Different types of triangles, Algebraic identities.</p> <p>IV) Learn multiplication tables from 2 to 25 and write it 2 times in your notebook.</p>

Class-8th	Kendriya Vidyalaya Bacheli Summer Vacation Homework
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Topics: i) Square numbers, cube numbers
 ii) Recreational puzzles (Word search, Calendar, Puzzle words)
 iii) Polygons and their properties
 iv) Mean, Median and Mode
 v) Who am I?
 vi) Factors and Multiples
 vii) Rational numbers
 viii) Palindromes
 ix) Prime numbers

Note: Section-A contains 40 MCQs, Section-B contains

Instructions: a) Do the work neatly in your homework notebook.
 b) Complete your work with full steps and clear handwriting.

Q.N.	SEC-A									
1	Identify the square number between 60 and 70. a) 62 b) 64 c) 69 d) 60									
2	Which number is equal to its own cube? a) 1 b) -1 c) both a) and b) d) option a) or b)									
3	Search the mathematical term from the word "CREATION". a) AREA b) ARC c) RADIUS d) None of these									
4	The largest 2-digit square number is a) 99 b) 91 c) 81 d) 16									
5	If the digit in one's place of a number is 2, then the last digit of its cube will be a) 2 b) 4 c) 6 d) 8									
6	If we take a 3×3 square grid from the calendar of this month "MAY" as given below, then the arithmetic mean of the numbers in 2 nd column is <table><tr><td>13</td><td>14</td><td>15</td></tr><tr><td>20</td><td>21</td><td>22</td></tr><tr><td>27</td><td>28</td><td>29</td></tr></table> a) 22 b) 23 c) 21 d) none of these	13	14	15	20	21	22	27	28	29
13	14	15								
20	21	22								
27	28	29								
7	The difference between smallest 3-digit square number and smallest 1-digit square number is a) 98 b) 99 c) 80 d) none of these									
8	Search the mathematical term from the word "AEROPLANE". a) AREA b) PLANE c) both a) and b) d) none of these									
9	The largest 2-digit cube number is a) 8 b) 27 c) 81 d) 64									
10	Which of the following number is a square number? a) 23 b) 81 c) 48 d) 63									
11	The mathematical term hidden in the jumble word " ECLRCI " a) AREA b) CIRCLE c) SQUARE d) none of these									
12	The square number can never ends with the digit _____, _____, _____ and _____.									

	a) 2, 5, 7, 9	b) 2, 3, 5, 9	c) 2, 3, 7, 8	d) 1, 3, 5, 9									
13	Which of the following is a quadrilateral? a) Triangle b) Pentagon c) Hexagon d) Square												
14	The cube of an odd number is _____ ? a) Odd number b) Even number c) Prime number d) Even or odd number												
15	Which of the following number is not a cube number? a) 27 b) 1000 c) 48 d) 64												
16	What is the sum of the interior angles of a quadrilateral? a) 180° b) 360° c) 720° d) 540°												
17	The mean of given set of numbers 23, 21, 18, 19, 29 is a) 20 b) 21 c) 22 d) 25												
18	Make a meaningful mathematical word from the jumble word "ARIONOTT". a) ROTATION b) TURNING c) EQUATION d) none of these												
19	Which of the following is a factor of 7? a) 26 b) 38 c) 63 d) 51												
20	Which quadrilateral has exactly one pair of parallel sides? a) Parallelogram b) Rhombus c) Trapezium d) Rectangle												
21	What are the factors of 18? a) 1, 2, 3, 4, 6, 9, 18 b) 1, 2, 3, 6, 9, 18 c) 1, 2, 3, 4, 6, 9 d) 1, 2, 3, 6, 8, 18												
22	The median of first ten natural numbers is a) 5 b) 6 c) 5.5 d) none of these												
23	The number 98 is a multiple of ? a) 3 b) 4 c) 14 d) 9												
24	The prime factorization of 196 in exponential form is a) $2^2 \times 7$ b) $2^3 \times 3$ c) $2^2 \times 7^2$ d) $2^2 \times 5$												
25	Which of the following is a kite ? a) A quadrilateral with four equal sides b) A quadrilateral with opposite sides equal c) A quadrilateral with two pairs of adjacent sides equal d) A quadrilateral with all angles equal.												
26	If we take a 3×3 square grid from the calendar of this month "MAY" as given below, then the sum of the numbers in 3 rd row is <table border="1" style="margin: 10px auto;"><tr><td>8</td><td>9</td><td>10</td></tr><tr><td>15</td><td>16</td><td>17</td></tr><tr><td>22</td><td>23</td><td>24</td></tr></table> a) 22 b) 23 c) 21 d) none of these				8	9	10	15	16	17	22	23	24
8	9	10											
15	16	17											
22	23	24											
27	The most frequent observation in the given data is called? a) Mean b) Mode c) Range d) none of these												
28	The sum of first three multiples of 4 is? a) 20 b) 24 c) 32 d) 28												
29	If three angles of a quadrilateral are 100°, 95° and 80°, then the fourth angle is a) 95° b) 100° c) 80° d) 85°												
30	The base & exponent of 4^6 is												

	a) 6, 4 b) 4, 7 c) 6, d) 4, 6									
31	$20 \div \frac{1}{4} = ?$ a) 80 b) $\frac{1}{80}$ c) $\frac{1}{144}$ d) 120									
32	The median of given set of numbers 12, 11, 18, 15, 21, 17, 16 is a) 15 b) 17 c) 16 d) 18									
33	If we take a 3×3 square grid from the calendar of this month "MAY" as given below, then the prime numbers in the given table are <table border="1"><tr><td>11</td><td>12</td><td>13</td></tr><tr><td>18</td><td>19</td><td>20</td></tr><tr><td>25</td><td>26</td><td>27</td></tr></table> a) 11, 18 & 26 b) 11, 12 & 20 c) 19, 20 & 26 d) 11, 13 & 19	11	12	13	18	19	20	25	26	27
11	12	13								
18	19	20								
25	26	27								
34	The mode of given observation 9, 8, 9, 4, 9, 3, 5, 9, 4, 4, is a) 4 b) 9 c) 5 d) 3									
35	If we take a 3×3 square grid from the calendar of this month "MAY" as given below, then identify the prime numbers in 3 rd column <table border="1"><tr><td>13</td><td>14</td><td>15</td></tr><tr><td>20</td><td>21</td><td>22</td></tr><tr><td>27</td><td>28</td><td>29</td></tr></table> a) 13 b) 27 c) 21 d) 29	13	14	15	20	21	22	27	28	29
13	14	15								
20	21	22								
27	28	29								
36	The number "1" is a) Prime number b) Composite number c) Neither prime nor composite d) none of these									
37	$36 \div \frac{1}{4} = ?$ a) 9 b) $\frac{1}{9}$ c) $\frac{1}{144}$ d) 144									
38	The standard form of $\frac{22}{-55}$ is a) $\frac{-3}{5}$ b) $\frac{-5}{6}$ c) $\frac{-5}{2}$ d) $\frac{-2}{5}$									
39	Which of the following number is a Palindrome? a) 12345 b) 34343 c) 67567 d) 79878									
40	The value of $4^0 + 5^0 - 2^0$ is a) 7 b) 3 c) 5 d) 2									
Q.N.	SEC-B									
1	Find the mean of first five prime numbers.									
2	Answer the following questions: a) The largest 2-digit square number is _____. b) The smallest 3-digit cube number is _____. c) The difference between smallest 3-digit square number and largest 2-digit square number is _____.									
3	Find the factors of following numbers: a) 18 b) 28 c) 56 d) 25									
4	Write all cube numbers from 1 to 100.									

5	A (ludo) die was thrown 20 times and the following observations were recorded: 2, 4, 1, 3, 4, 5, 2, 1, 6, 2. Find the mode and mean of the above data.												
6	Match the following columns with correct options:												
	<table border="1"> <thead> <tr> <th>COLUMN-A</th><th>COLUMN-B</th></tr> </thead> <tbody> <tr> <td>1 Meaningful word from the jumbled word "OPMCSAS"</td><td>28</td></tr> <tr> <td>2 4 is a factor of</td><td>Mode</td></tr> <tr> <td>3 Equilateral triangle</td><td>$\frac{2}{3}$</td></tr> <tr> <td>4 Reciprocal of $\frac{3}{2}$</td><td>All sides equal</td></tr> <tr> <td>5 Most frequently occurring value</td><td>COMPASS</td></tr> </tbody> </table>	COLUMN-A	COLUMN-B	1 Meaningful word from the jumbled word "OPMCSAS"	28	2 4 is a factor of	Mode	3 Equilateral triangle	$\frac{2}{3}$	4 Reciprocal of $\frac{3}{2}$	All sides equal	5 Most frequently occurring value	COMPASS
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5 Most frequently occurring value	COMPASS												
7	Find first 3 common multiples of: a) 8 and 6 b) 9 and 12 c) 15 and 12												
8	Add the following rational numbers: a) $\frac{3}{7} + \frac{5}{2}$ b) $\frac{-8}{5} + \frac{12}{7}$												
9	The weights of 10 students (in kg) are 40, 52, 34, 47, 31, 35, 48, 41, 44, 38 Find the median weight.												
10	Which of the two rational numbers $-\frac{4}{11}$ and $-\frac{2}{11}$ is greater? Explain your answer.												
11	If two angles of a triangle are 45° and 75° , then find the value of third angle.												
12	Identify the SQUARE numbers : 1, 7, 16, 24, 62, 100, 81, 48, 64.												
13	Find the median of first 10 odd natural numbers.												
14	Write 3 different palindromic numbers of: a) 3-digits b) 5-digits c) 4-digits												
15	Write the pair of adjacent sides of the quadrilateral PQRS.												
16	Draw the following polygons: a) Pentagon b) Hexagon c) Triangle Also find the number of diagonals in each case.												
17	Write TRUE/FALSE: i) The sum of all angles in a pentagon is 540° . ii) 1 is neither prime nor composite. iii) 4 is not a factor of 22. iv) Additive invers of $-\frac{3}{7}$ is $\frac{7}{3}$.												
18	Write first five multiples of 12.												
19	Test whether 97 is a prime number.												
20	Find the mode of the data: 10, 8, 4, 7, 8, 11, 15, 8, 6, 8												
21	Find whether the following numbers are palindromes or not: a) 121 b) 2342 c) 16761 d) 15277251												

22	Answer the following questions: a) Find all prime numbers upto 35. b) Find prime numbers between 40 and 50.
23	Name the polygon: a) 3 sides b) 7 sides c) 10 sides
24	If the perimeter of a rectangle whose length 24 m is 64 m. Find the breadth and area of the rectangle.
25	What is a triangle? Write the name of types of triangle.
SEC-C	
	<u>ACTIVITIES:</u> I) Solve at least 5 riddles/puzzles/brain teasers from a puzzle book. II) Write at least 5 real-life situations where you saw mathematics being used(e.g., shopping, time management, measurements) III) Prepare a neat & clean chart (FULL SIZE) from the following topics: (P Prepare only one) INTEZERS, Different types of triangles, Algebraic identities. IV) Learn multiplication tables from 2 to 25 and write it 2 times in your notebook.