Delhi Public School, Bahadurgarh

CLASS-VIII **Subject Maths**

S.NO.	TYPE OF QUESTIONS	NO. OF QUESTIONS	MARKS	TOTAL
1.	FILL IN THE BLANKS	10	1/2MARK	5
2.	MCQ	10	1MARK	10
3.	SAQ	4	2MARKS	8
4.	LAQ	5	3MARKS	15
5.	VLAQ	3	4MARKS	12

VLAQ consists of a value based question

Delhi Public School, Bahadurgarh

Summative Assessment Sample Paper

Class – VIII

Mathematics Set 1

Max Time : 3 hrs. Marks: 90

General Instructions:- Date .09.15

1) All questions are compulsory.
2) There are 4 Sections. Section A has 4 questions. Section B has 7 questions. Section C has 6 questions. Section D has 7 questions.
3) Use of calculators is prohibited.
4) Marks are allotted along with the questions.

SECTION- A
Q1. Multiple Choice Questions **(1mark each)**

Q1. Sum of all interior angles of a parallelogram is
(a) 180 (b) 360 (c) 540 (d) 240

Q2. A parallelogram each of whose angles measures 90^o is _____.
(a)rectangle (b)rhombus (c)kite (d)trapezium

Q3. If the three angles of a quadrilateral are 120^o, 130^o, 10^o then what is the fourth angle ?
(a)30 (b)100 (c) 40 (d) 90

Q4. What is the probability of getting an even number ?
(a) 1 (b) 0 (c) both (d) none

Q5.The square of 23 is :
(a)529 (b)526 (c) 46 (d) 429

Q6.Which of the following number would have digit 5 at units place :
(a) 95^2 (b) 59^2 (c) 24^2 (d) 42^2

Q7.Which of the following is not a perfect cube ?
(a) 216 (b) 343 (c) 125 (d) 108

Q8. 9 is the cube root of _____ .
(a) 343 (b) 729 (c) 629 (d) 81

Q9. If 3x-2=4, then what is the value of x?

a)3 b)2 c)6 d)9

Q10. The additive inverse of 67 is

a) 67 b)-67 c)0 d) 1

Q2. Fill in the blanks: **(1mark each)**

i) A simple closed curve made up of only _____ is called a polygon .
ii) All the sides of a regular polygon are _____.
iii) A parallelogram each of whose angles measures 90_o is _____.
iv) In loss, the selling price is _____ than cost price.
v) The square of a number can have _____ number of the zeroes at the end.
vi) 100 is a perfect _____.
vii) Data represented by circle is called_____.
viii) A quadrilateral can be constructed if the length of _____ sides and diagonal is given.
ix) Opposite angles of a rhombus are _____
x) _____ numbers can be represented on number line.

Q3. True or False: **(1mark each)**

i) The reciprocal of (a/b) is (-b/a).
ii) The additive inverse of 88 is -88.
iii) In a square, opposite sides and angles are equal.
iv) In a rhombus, diagonals are perpendicular to each other.
v) The profit % is calculated on S.P.

vi) A quadrilateral can be constructed if 3 sides and 2 included angles are given.

vii) Probability of a number cannot be negative.

viii) The square of an even number is odd.

ix) The cube of an odd number is odd.

x) In compound interest, A= P+I.

SECTION-B **(2marks each)**

Q4. Verify that -(-a) = a for a= $-\frac{13}{17}$.

Q5. Find four rational numbers between $\frac{3}{5} and \frac{7}{5}$.

Q6. The sum of two numbers is 4000. If 15% of one is equal to 25% of the other. Find the numbers.

Q7. Solve : $\frac{1}{2x+1} - \frac{1}{3x-1} = 0$

Q8. The measures of two adjacent angles of a parallelogram are in the ratio of 3:2 . Find the Measure of each of the angles of the parallelogram.

Q9. Draw a rectangle whose length and breadth are 7cm and 5.4cm.

Q10. Area of a square plot is 31.36 sq. m. Find the side of the square plot.

SECTION- C **(3marks each)**

Q11. A dealer buys a table listed at Rs.500 and gets discount of 28%. He spends Rs.15 on transportation and sells it at a gain of 20%. Find the selling price of the table.

Q12. Is 68600 a perfect cube? If not, find the smallest number by which 68600 must be multiplied to get a perfect cube. (1+2=3)

Q13. In a right angled triangle, angleB =90. If AB=6cm BC=8cm then, find AC?

Q14. Draw a pie chart showing following information (TOTAL = 24hours.)

WORK DONE	SLEEP	SCHOOL	PLAY	HOMEWORK	OTHERS
TIME	8HOURS	6HOURS	3HOURS	4HOURS	3HOURS

Q15.Construct a quadrilateral ABCD , given that BC=4.5cm AD=5.5cm,CD=5cm,AC=5.5cm & BD=7cm. Write the steps also. (2+1=3)

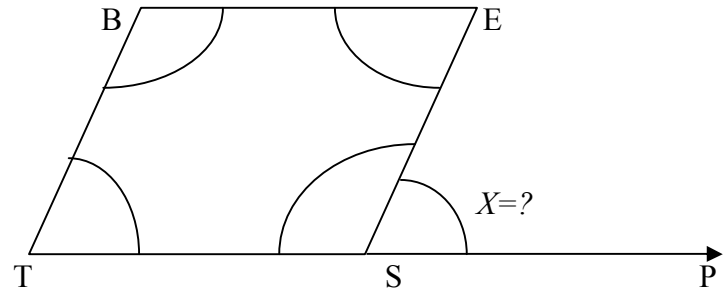
Q16. Draw a histogram for the following information:

NAME OF DAYS	MAX TEMP IN Celsius
Monday	38
Tuesday	42
Wednesday	35
Thursday	32
Friday	45
Saturday	40
Sunday	38

SECTION – D **(4marks each)**

Q17. Find the least number that should be added to 1300 so as to get a perfect square.
Also, find the square root of the perfect square so obtained. (2+2=4)

Q18. BEST is a parallelogram in which angleEST=100. Find the values of *angleB, angleE ,angleT , and X?*state reason. (1+1+1+1=4)



Q19. A shopkeeper purchased a DVD player for Rs.2000 & RADIO SET for Rs.750. if he sells the DVD at a profit of 20% and RADIO at a loss of 5%. Find the net gain or loss.

Q20. The sum of the digits of a two digit number is 15. If the number formed by reversing the digit is less than the original number by 27. Find the original number.

Q21. Verify $X(Y+Z) = XY + XZ$: (2+2=4

a) $X = -4, Y = 5, Z = -7$

b) $X = \frac{8}{3}$ $Y = \frac{5}{3}$ $Z = \frac{2}{9}$

Q22. Write a Pythagorean triplet whose one member is (a) 16 & (b) 8 (2+2=4)

Q23. A football team won 10 matches out of the total number of matches they played. If their win percentage was 40, then how many matches did they play in all?

DELHI PUBLIC SCHOOL BAHADURGARH

SA 2 Sample Paper
Class – VIII

Date: **Subject – Mathematics** **Total pages: 04**

Time: 3 hours SET-1 Maximum marks: 90

General Instructions:

1. *All questions are **compulsory.***
2. *The question paper is divided into 2 sections A, B. **Section-A** is of 30marks . **Section-B** is of 60marks.*
3. *There is no overall choice.*
4. *The marks are allotted in front of each question.*
5. *Use of calculators is not permitted.*

SECTION-A (30MARKS)

I. MULTIPLE CHOICE QUESTIONS (1MARK EACH)

Q1. Value of $(4p - 3q)^2$ is
(a) $16p^2 - 9q^2$ (b) $16p^2 - 9q^2 + 24pq$ (c) $16p^2 - 9q^2 - 24pq$ (d) $16p^2 + 9q^2 - 24pq$

Q2. $(9x+a)(x+b)$ is equal to
(a) $x^2 + ax + ab$ (b) $9x^2 + (a+9b)x + ab$ (c) $x^2 + bx + ab$ (d) $x^2 + ab$

Q3. The length of parallel sides of trapezium is 14 cm and 6 cm and its height is 5 cm. Its area will be
(a) 50 cm^2 (b) 100 cm^2 (c) 210 cm^2 (d) 10 cm^2

Q4. The area of four walls of the room is
(a) 2 (lb + bh + hl) (b) 2l (h + b)
(c) 2 (lb x bh x hl) (d) 2h (l + b)

Q5. The volume of cuboid of dimensions 4 cm, 2 cm and 3 cm is
(a) 24 cm^3 (b) 12 cm^3 (c) 24 cm^3 (d) 26 cm^3

Q6. The value of $8^2 \div 2^3$ is.....
(a) ¼ (b) 8 (c) 1/8 (d) -8

Q7. Usual form of the expression 9×10^{-5} is given by

(a) 0.00009 (b) 0.000009 (c) 90×10^{-4} (d) 0.09×10^{-3}

Q8. The value of 3p(4p-5)+3 for p=3:
(a) -6 (b) 66 (c) 106 (d) 0

Q9. The volume of rectangular box whose length, breadth and height is 2p,4q.8r respectively is
(a) 14pqr (b) 2p+4q+8r (c) 64pqr (d) 64

Q10. The height of cuboid whose volume is 200 cubic cm and base area is 20 sq.cm is
(a) 220 cm (b) 100 cm (c) 10 cm (d) 20 cm

II. FILL IN THE BLANKS (1MARK EACH)

Q1. If 12 balls cost Rs.144, then cost of 6 balls is_____.

Q2. _____ - $32^0 = 1$.

Q3. The edge of a cube is 6cm, the lateral surface area is _____.

Q4. If a=2 and b=3, then 5a-2b= _____.

Q5. Using Euler's formula, given that E=12 , V=6 and F=_____.

Q6. The standard form of 0.000000000000016 is _____.

Q7. The quotient of 152875 divided by 9 is _____.

Q8. The general form of a two- digit number XY is _____.

Q9. If area of a parallelogram is 34000 sq. m whose base is 20m, the corresponding altitude is_____.

Q10. The value of $(x^2 - 81) - (x - 9)(x + 9)$ is _____.

III. VERY SHORT ANSWER QUESTIONS(1 MARK EACH)

Q1. Divide $144x^2y^2z^2$ by 12xyz.

Q2. Find the common factors of the given terms: 19pqr, 38pqr.

Q3. Find the value of $(11^2 - 9^2)$.

Q4. Find the values of the letters

$$\begin{array}{r} 3\ \ A \\ +\ 4\ \ 2 \\ \hline \end{array}$$

Q5. The area of the rhombus is 240 sq. cm & one of the diagonals is 16cm. Find the length of other diagonal.

Q6. Find the volume of a cube whose total surface area is 384 sq. cm

Q7. Simplify: $5^{-1} \times 6^{-1} \times 100^{0}$

Q8. Multiply: (x-2y) and (x-2y).

Q9. Define prisms & pyramids.

Q10. Write the formula for the area of trapezium.

SECTION- B (60MARKS)

I. SHORT ANSWER QUESTIONS (18MARKS)

Q1. The circumference of the base of a cylinder is 132 cm & height is 18cm. find its curved surface area. (2)

Q2. The diagonals of a rhombus are 6cm & 8cm. Find its length of each side. (2)

Q3. Solve: $\frac{1}{3}(2m+1) - \frac{1}{2}(m-1) = 5$. (2)

Q4. Simplify: $(\sqrt{144} - \sqrt{100}) + (\sqrt{25} - \sqrt{16})$ (2)

Q5. Tell in which quadrant do they lie: a) (-2,-4) b) (-7,8) (1+1)

Q6. If each edge of a cube is doubled, by how many times its volume will increase? (2)

Q7. A man earns Rs. 924 in one week. In how many days will he earn Rs. 1716? (2)

Q8. Subtract the sum of $(3x-x^2+7)$ and $(-2x-3+5x^2)$ from 7x. (1+1)

Q9. By what number 4^{-1} should be multiplied so that the product is equal to 4^{1} ? (2)

II. LONG ANSWER QUESTIONS(18MARKS)

Q1. Find the value of p: (1.5+1.5)

a) $11^{4p} \times 11^{-3} = 11^{-2} \times 121^{4}$ b) $p^{5} \div \frac{1^{-3}}{p} = 49$

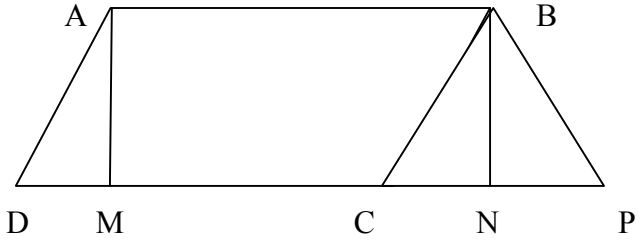
Q2. If $a^2+b^2= 29$, ab = 2. Find: i) (a-b) ii) (a+b) (1.5+1.5)

Q3. What will be the product, if we multiply double of (x-2y) by the triple of (x+2y)? (3)

Q4. Factorise: $(2a + 3b)^2 - 5(2a + 3b) - 14$ (3)

Q5. In a hostel, 100 students had provisions for 130days. After 10days, 20 students left the hostel. How long would the remaining food last? (3)

Q6. Find area of fig.ABPD.



AB=12cm
AD=BC=BP=CP=8cm
AM=5cm
(3)

III. VERY LONG ANSWER QUESTIONS (24marks)

Q1. i) If the three digit number $24x$ is divisible by 9, what is the value of x? (2)

ii) If 31z5 is a multiple of 9, what is the value of z? (2)

Q2. Draw the graph of the distance travelled by a car with the given data:

TIME (in hours)	8am	9am	10am	11am
DISTANCE (km)	60	120	180	240

1) Is the graph linear? (3+1)

Q3. Plot these points on a graph paper P(-1,-2) Q(2,-2) R(-1,-4) S(2,-4) and answer these:

a) Identify the figure obtained. b) find the area of the figure PQRS. (2+1+1)

Q4. A iron piece of volume 2750cubic cm is drawn out into a wire of radius5cm, what will be the length of the wire so obtained? (4)

Q5. VALUED BASED QUESTION: City A has an area ($2x^2$+6x+4) sq. m of green cover. City B has an area (x^2+4x+4) sq. m of green cover. Few people of the city are destroying the green cover by dividing (x^2-4) sq. m from each city. How much area is left with CITY A & CITY B? What value does this act depict? (1.5+1.5+1)

Q6. Show that $(4pq + 3q)^2 - (4pq - 3q)^2 = 48pq^2$ (4)