CLASS VIII
SAMPLE PAPER
MATHEMATICS

SECTION A :Answer the following by selecting the correct alternative. (1 mark each)　　　　**10**

1. The additive inverse of $\dfrac{-7}{-10}$ is _____.

    a) $\dfrac{10}{7}$ 　　　　b) $-\dfrac{7}{10}$ 　　　　c) $-\dfrac{10}{7}$ 　　　　d) $\dfrac{7}{10}$

2. _____ is linear equation in one variable.

    a) $2x^5 + 1$ 　　　　b) $xyz + 1$ 　　　　c) $a^2 + 1$ 　　　　d) $2 + y$

3. In the class interval 0-50 the mid value is_____.

    a) 40 　　　　b) 25 　　　　c) 40 　　　　d) 50

4. Which of the following numbers is a perfect square?

    a) 27 　　　　b) 125 　　　　c) 9 　　　　d) 8

5. $a^2 \times a^{22} \times a^{222} = $_____.

    a) a^2 　　　　b) a^{248} 　　　　c) a^{44} 　　　　d) a^{198}

6. The formula for area of a semicircle is _____.

    a) $\dfrac{1}{2}\pi r^2$ 　　　　b) πr^2 　　　　c) $2\pi r^2$ 　　　　d) $\pi r + D$

7. $\left[5^2\right]^4 = $_____

    a) 5^5 　　　　b) 5^8 　　　　c) 5^6 　　　　d) 1

SECTION B   Answer the following in one word or a line (1 mark each).　　　　**08**

8. Factorize:　　　$6XY - 4Y + 6 - 9x$

9. Observe the following table and find the unknown value.

10. Check whether 287155 is divisible by 9 or not ?

x	4	6	7	10	12	15
y	24	36	42	60	72	__

11. Simplify: $\dfrac{1}{4}$ [(-2) – (-6)] = _____ .

12. Multiply: 50.505×0.5.

13. Find the value of y: $12a + (-24) = 5a + 25$

14. Find the value: $2 + \dfrac{1O}{7}$ = _____ .

15. Find the measure of a Complementary angle of measure $50.5°$.

SECTION   **Answer the following (2 mark each).**   18

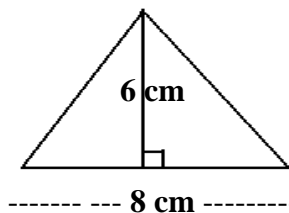**16.** Solve: $\dfrac{x-2}{5} = \dfrac{22}{3}$

17. List the outcomes when a coin and a dice are tossed together.

18. Using Euler's formula, calculate the no of faces of a polyhedron with 12 vertices and 30 edges.

19. Six pipes are required tofill a tank in 1hour 20 minutes.   How long will it take if only 5 pipes of the same types are used?

20. Factorise: $a^2 + 6a -16$

21. Subtract : $5x^2 - 4y^2 - 6x + y$ from $15y^2 +5x – 10y +6x^2$.

22. Find the area of the given triangle

6 cm

------- --- **8 cm** ---------

SECTION D Answer the following (3 mark each).   24

23. A closed cylindrical tank is of diameter 14m and height 3m. Find the total surface area and the Volume of the cylinder.

24. Solve: $\dfrac{14a+8}{2a+4} = \dfrac{-8}{6}$

25. Divide: $(3m^2 +19m + 6) \div (m+2)$.

26. Prepare a frequency distribution table for the following un-grouped data.
Xi's : 3,4,4,1,2,4,3,3,1,2,3,3,5, 3,5,2,1,1,2,4.

27. A box of chocolates is divided among 24 children , they will get 5 chocolates each. If the number of children were reduced by 4 then how many will each child get.

28. Ramesh took a loan of Rs.80,000 from a bank at the rate of 10%. Find the amount to be paid at the end of $1\dfrac{1}{2}$ year if the interest is compounded half yearly.

29. Multiply: $\left(\dfrac{x}{2} + \dfrac{y}{4} \right)\left(\dfrac{x}{2} - \dfrac{y}{4} \right)$

30. The diagonals of a rhombus are 16cm and10cm. Find its area.

SECTION E Answer the following (4 mark each).   20

CBSE Sample Papers | CBSE Guess Papers | CBSE Practice Papers | Important Questions | CBSE PSA | CBSE OTBA |
Proficiency Test | 10 Years Question Bank | **CBSE Guide** | CBSE Syllabus | Indian Tutors | **Teacher' Jobs** CBSE eBooks |
Schools | Alumni | CBSE Results | CBSE Datesheet | **CBSE News**

31. Plot the following rational numbers on a number line. $(-6), \dfrac{1}{4}, \sqrt{9}, -5.5, \dfrac{3}{-4}$ and $\sqrt[5]{32}$.

32. The digits of a two digit number differ by three. If the digits are interchanged the new number is

added to the original number, we get 143.Find the original number.

33. Find the least number to be multiplied to 1008 to get a perfect square. Also find the square root.

34. Find the square root of 576 by division method.

35. Simplify : $\quad 2^{10} \times \dfrac{3^5}{2^4} \times \dfrac{2^{-2}}{2^{10}} \times \dfrac{2^{-2}}{6^{-3}} \times \dfrac{2^5}{3^4} \times \dfrac{3^0}{6^4}$

SECTION F   Answer the following (5 mark each).   20

36. Perimeter of a square garden is100m. A road 5m broad passes inside and around the border of the garden. Find the area occupied by the road and cost of paving tiles at the rate of Rs.55/m^2

37. Draw the graph with suitable scale using the following values and then answer the questions.
The distance traveled by a car is given below.
a) How much distance did the car cover during the period 7.30 to 8am?
b) What was the time when the car covered 100 km from its starting point?

Time (in hours)	6 a.m.	7 a.m.	8 a.m.	9 a.m.
Distance (in Km's)	40	80	120	160

38. Information regarding famous comics read by students of a school is given below. Represent it by a pie chart.

Flavours	Percentage of students
Chandamama	40%
Vikram Vaital	35%
Bhootnath	20%
Manrake	5%

39. Information regarding no of employees and their ages is given in the following table. Prepare a histogram.

Class interval	10-20	20-30	30-40	40-50	50-60
Frequency	3	4	6	3	1

CBSE Sample Papers | CBSE Guess Papers | CBSE Practice Papers | Important Questions | CBSE PSA | CBSE_OTBA |
Proficiency Test | 10 Years Question Bank | **CBSE Guide** | CBSE Syllabus | Indian Tutors | **Teacher' Jobs** CBSE eBooks |
Schools | Alumni | CBSE Results | CBSE Datesheet | **CBSE News**