CBSE Class 8 Maths Sample Paper 3

Time Durations: 2¹/₂hrs

General instructions

- 1. All questions are compulsory.
- 2. The question paper in divided into four sections.
- 3. The question paper contains four sections of 60 marks
 - *i.* Section –A question no. 1-8 carry ½ mark each. (MCQ)
 - *ii.* Section –B question no. 9-14 carry 2 marks each.
 - *iii.* Section –C question no. 15-24 carry 3 marks each.
 - *iv.* Section –D question no. 25-34 carry 3 marks each.
- 4. Internal choice has been given in Section –D only in 2 questions.
- 5. Section-D comprises of one value based questions.

SECTION-A

- 1. Which of the following is the smallest negative integer?
 - (a) -2 (b) -1 (c) -3 (d) 0
- 2. Which of the following shows three consecutive multiples of 8?
 - (a) 8x, (x+8), (x+16)(b) 8x, 8(x+1), 8(x+2)(c) 8x, 8x+8, x+16(d) x, (x+8), (x+16)



- 4. In a quadrilateral 'Rock' which of the following is a diagonal?
 - (a) \overline{RO} (b) \overline{OK} (c) \overline{OC} (d) \overline{KR}
- 5. When a die in thrown list the outcomes of an event of getting 'a prime number'.
 - (a) 2,3,5 (b) 1,3,5 (c) 1,2,3 (d) 2,5,6
- 6. Perfect square number between 15 and 20 is:
 - (a) 17 (b) 16 (c) 18 (d) 19

7.
$$\sqrt[3]{\frac{216}{512}} =$$

(a) $\frac{6}{18}$ (b) $\frac{5}{3}$ (c) $\frac{6}{8}$ (d) $\frac{4}{68}$

8. 20% of 3.4 is.

Maximum Marks: 60

SECTION-B

- 9. Simplify $\frac{1}{2} \times \frac{1}{3} + \frac{1}{4} \times \frac{1}{3}$ by using appropriate property.
- 10. Write the next step for the solution of linear equation $\frac{x}{3} + \frac{7}{2} = \frac{3}{2}$.
- 11. What is regular polygon? State the name of a regular polygon of 6 sides.
- 12. Following are the marks (out of 50) obtained in mathematics of 10 students.
 - 21, 40, 22, 21, 11, 30, 21, 9, 49 which data has the maximum 'Frequency'?
- 13. Is 45 a perfect square? Write with reason.
- 14. Convert 2 yrs 3 month into years.

SECTION-C

- 15. Multiply $2\frac{1}{3}$ by the reciprocal of $-\frac{7}{6}$
- 16. Represent $\frac{-3}{7}$, $\frac{12}{5}$ on the number line.
- 17. Nine is added to two times a number gives four. Represent it by a linear equation in one variable. Also find solution.
- 18. Solve equation : $\frac{4x+8}{5x+8} = \frac{5}{6}$
- 19. F O L D is a rectangle. Its diagonals meet at pt. p find x, If it DO = 2x + 4, FL = 3x + 1



- 20. How many sides does a regular polygon have if the measure of an exterior angle is 45° .
- 21. The daily income of a group of factory workers is given in the following table.

Daily Income (In	Number of
Rs.)	Worker
100 - 125	45
125 - 150	35
150 - 175	35
175 - 200	55
200 - 225	30
225 - 250	50

- i. What is the size/width of each class Interval?
- ii. Which class has the least frequency ?
- iii. What is the upper limit of class interval 175-200?
- iv. Which class intervals have equal frequencies ?

- 22. Find the square root by division method 1024.
- 23. Find the smallest number by which 72 must be multiplied to obtain a perfect cube.
- 24. Suzaine purchases a vanity box for rs. 5600 including 8% vat. Find the price before vat was added.

SECTION-D

- 25. Write five rational numbers between $\frac{-1}{2}$ and $\frac{3}{4}$
- 26. Shriya is twice as old as Arjun. Five years ago her age was three times Arjun's age.Find their present ages.
- 27. Find the angle measure x in the following figure.



- 28. Construct Quadrilateral SONG where SO = 4 cm, ON = 6 cm, NG = 5 cm, GS = 5.5 cm & SN = 7 cm
- 29. Choice of food for a group of people is given in the following table. Draw a pie chart.

Favorite food item	No of People
Daal Baati	40
Paneer Tikka	30
Masala Dosa	25
Burger	25
Total	120

Which type of food should be taken during adolescence?

- 30. Construct a frequency distribution table for the data on marks of 20 college students of a class (out of 100) using class intervals as 30-35, 35-40 and 50 on.
- 31. Write a Pythagorean triplets using when the smallest member is 9.

OR

There are 2401 students in a school. P.T. teacher wants them to stand in rows & columns such that the no. of rows to equal to the no. of columns. Find the number of rows.

32. In a right triangle TRY $\angle R = 90^{\circ}$ If TR = 8 cm, RY = 6 cm find TY

- 33. Find the cube root of 13824 by prime factorization method.
- 34. Find CI on Rs. 12500 for 2yrs at 12% per annum compounded annually.

OR

The population of a place increased to 54000 in 2003 at a rate of 5% per annum. What would be its population in 2006?