# CBSE Class 8 Maths Sample Paper 3 

## Time Durations: 2½hrs

## 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 - question no. 1-8 carry $1 / 2$ 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) $8 x,(x+8),(x+16)$
(b) $8 x, 8(x+1), 8(x+2)$
(c) $8 x, 8 x+8, x+16$
(d) $x,(x+8),(x+16)$
3. Which of the following indicates "segments of equal length"
(a)

(b)

(c)

(d)

4. In a quadrilateral 'Rock' which of the following is a diagonal?
(a) $\overline{R O}$
(b) $\overline{O K}$
(c) $\overline{O C}$
(d) $\overline{K R}$
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) $\frac{4}{6}$
8. $20 \%$ of 3.4 is.

## 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 $: \frac{4 x+8}{5 x+8}=\frac{5}{6}$
19. F O L D is a rectangle. Its diagonals meet at pt. p find x , If it $D O=2 x+4, \quad F L=3 x+1$

20. How many sides does a regular polygon have if the measure of an exterior angle is $45^{\circ}$.
21. The daily income of a group of factory workers is given in the following table.

| Daily Income (In <br> Rs.) | Number of <br> 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 $\mathrm{SO}=4 \mathrm{~cm}, \mathrm{ON}=6 \mathrm{~cm}, \mathrm{NG}=5 \mathrm{~cm}, \mathrm{GS}=5.5 \mathrm{~cm} \quad \& \mathrm{SN}=7 \mathrm{~cm}$
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 $T R Y \angle R=90^{\circ}$ If $\mathrm{TR}=8 \mathrm{~cm}, \mathrm{RY}=6 \mathrm{~cm}$ find TY
33. Find the cube root of 13824 by prime factorization method.
34. Find CI on Rs. 12500 for 2 yrs 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 ?

