

CBSE Board
Class VIII Mathematics
Term I
Sample Paper - 2

Time: 1 hour

Total Marks: 25

General Instructions:

1. All questions are **compulsory**.
2. The question paper consists of **14** questions and it is divided into **three sections** A, B and C.
3. **Section A** comprises of **6** questions carrying 1 mark each.
4. **Section B** comprises of **5** questions carrying 2 marks each.
5. **Section C** comprises of **3** questions carrying 3 marks each.
6. Question numbers **1 to 6** in **Section A** are multiple choice questions where you are to select **one** correct option out of the given four.

Section A

(Questions 1 to 6 carry 1 mark each)

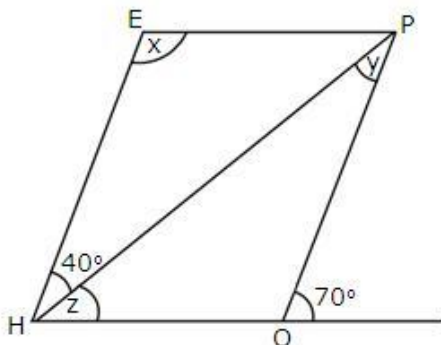
1. Equation $2x = 7 - \frac{3}{2}x$, with variables on one side can be expressed as
 - A. $\frac{1}{2}x = 7$
 - B. $\frac{7}{2}x = 7$
 - C. $7x = 7$
 - D. $2x = 7$
2. In the representation of rational numbers, the number line extends _____.
 - A. Indefinitely on both sides of 0
 - B. Indefinitely to the right side of zero
 - C. Indefinitely to the right side of 1
 - D. Indefinitely to the left side of zero
3. An octagon is made up of _____ sides.
 - A. 8
 - B. 10
 - C. 6
 - D. 5

4. If the cost of an item is increased from Rs 50 to Rs 55 then the percentage increase in cost is:
 A. 5%
 B. 10%
 C. 20%
 D. 15%
5. The sum $1 + 3 + 5 + 7 + 9 + 11 + 13 + 15 + 17$ is:
 A. 7^2
 B. 8^2
 C. 9^2
 D. 10
6. The smallest number by which $(4)^2\sqrt[3]{1000}$ must be divided to make it a perfect cube is _____.
 A. 20
 B. 10
 C. 5
 D. 2

Section B

(Questions 7 to 11 carry 2 marks each)

7. Find the multiplicative inverse of the following.
 (i) $\frac{-5}{8} \times \frac{-3}{7}$ (ii) $-1 \times \frac{-2}{5}$
8. In a two-digit number, the unit's digit is 7 more than the ten's digit. Sum of the digits is half of the whole number. Find the digits and number.
9. The given figure HOPE is a parallelogram. Find the angle measures x, y and z. Also, state the properties used.



10. There are 35 students in a class, out of which 20 are boys and 15 are girls. From these students one is chosen at random. What is the probability that the chosen student is
- a boy
 - a girl
11. Find the square of the number 82 using the property $(a + b)^2 = a^2 + b^2 + 2ab$.

Section C

(Questions 12 to 14 carry 3 marks each)

12. The following table shows the number of visitors to a park for the months January to March.

Month	January	February	March
No. of Visitors	150	300	250

- Construct a bar graph representing the given data.
 - What is the percentage increase in visitors in March as compared to January?
 - What percentage of visitors came in February as compared with total number of visitors over the three months?
13. A shopkeeper sells one transistor for Rs. 840 at a gain of 20% and another for Rs. 960 at a loss of 4%. What is his total gain or loss percent?
14. Construct a parallelogram ABCD in which AB = 6 cm, BC = 4.5 cm and diagonal AC = 6.8 cm.