

**Important Questions for Class 7 Maths Chapter 1:** Class 7 Maths Chapter 1 Integers, is a foundational topic that helps students understand positive and negative numbers, their properties, and operations.

Important questions from this chapter often focus on addition, subtraction, multiplication, and division of integers. Problems may include applying rules for operations with integers, comparing and ordering integers, and solving word problems involving real-life situations like temperature changes, profit and loss, or elevation differences. Mastering this chapter is essential for building a strong base in mathematics, as it forms the groundwork for higher-level topics in algebra and data handling.

## **Important Questions for Class 7 Maths Chapter 1 Overview**

Integers are a set of numbers that include all positive whole numbers, negative whole numbers, and zero. They form an important part of mathematics, as they extend the concept of whole numbers to include values less than zero.

Integers are represented on a number line, where positive integers lie to the right of zero, and negative integers lie to the left. They are widely used in real-life situations, such as calculating temperatures below zero, financial transactions involving profit and loss, and measuring elevations above or below sea level. Understanding integers and their operations is crucial for problem-solving in various mathematical concepts.

## **Important Questions for Class 7 Maths Chapter 1 PDF**

The Important Questions for Class 7 Maths Chapter 1 Integers PDF is a comprehensive resource to help students revise and practice key concepts from the chapter. It contains a variety of questions, ranging from basic operations on integers to complex problem-solving scenarios involving real-life applications. The PDF is structured to enhance conceptual understanding and prepare students effectively for their exams. For your convenience, the link to access the PDF is provided below.

**Important Questions for Class 7 Maths Chapter 1 PDF**

## **Important Questions for Class 7 Maths Chapter 1 Integers**

Here are some important questions from Chapter 1 (Integers) for Class 7 Maths that can help in understanding the concepts better:

**Very Short Answer Questions (1 Mark)**

**1. What is the additive inverse of -9?**

**Solution:** Additive inverse of -9 = 9.

**2. Find the value of  $(-6) + (+3)$ .**

**Solution:**  $(-6) + (+3) = -3$ .

**3. What is the product of  $(-4) \times (0)$ ?**

**Solution:**  $(-4) \times (0) = 0$ .

**4. Fill the blanks for  $-22 \times -13 \times 5 = -22 \times -13 \times 5 = \underline{\hspace{2cm}}$**

**Solution:** 14301430

**5. Fill the blanks for  $-3 \times 125 = -3 \times 125 = \underline{\hspace{2cm}}$**

**Solution:** 375-375

**Short Answer Questions (2-3 Marks)**

**1. Simplify:  $(-7) + (+8) + (-3)$ .**

**Solution:**  $(-7) + (+8) + (-3) = -7 + 8 - 3$   
 $= 1 - 3$   
 $= -2$

**2. Find the value of  $(-15) \times (-4) + (+20)$ .**

**Solution:**  $(-15) \times (-4) + (+20)$   
 $= 60 + 20$   
 $= 80$

**3. Subtract:  $(-10)$  from  $(+15)$ .**

**Solution:**  $15 - (-10) = 15 + 10 = 25$

**4. Write down a pair of integers for the following**

a. Sum gives -9-9

**Solution:** A pair of integers that gives sum -9-9 is  $(-6, -3)(-6, -3)$ .

b. Difference gives -11-11

**Solution:** A pair of integers that gives sum  $-11$  is  $(-14,3)$ .

**5. a. Write a positive and negative integer whose sum is  $-4$ .**

**Solution:**  $(4,-8)$  is a positive and negative integer whose sum is  $-4$ .

**b. Write a negative integer and a positive integer whose difference is  $-2$ .**

**Solution:**  $(-1,1)$  is a positive and negative integer whose sum is  $-2$ .

### **Long Answer Questions (4-5 Marks)**

**1. A submarine is at a depth of 300 m below sea level. It rises 125 m and then descends 50 m. What is its current position?**

**Solution:**

Initial position =  $-300$  m (below sea level)

Rising 125 m =  $-300 + 125 = -175$  m

Descending 50 m =  $-175 - 50 = -225$  m

Current position = **225 m below sea level**

**2. Verify:  $(-3) \times [(-4) + 5] = [(-3) \times (-4)] + [(-3) \times 5]$ .**

**Solution:** LHS =  $(-3) \times [(-4) + 5] = (-3) \times (1) = -3$

RHS =  $[(-3) \times (-4)] + [(-3) \times 5] = 12 + (-15) = -3$

LHS = RHS. Verified!

**3. A temperature of a place at 12 PM was  $6^{\circ}\text{C}$ . By 4 PM, it dropped by  $12^{\circ}\text{C}$ , and by 8 PM, it rose by  $7^{\circ}\text{C}$ . What was the temperature at 8 PM?**

**Solution:** Temperature at 12 PM =  $6^{\circ}\text{C}$

Drop by  $12^{\circ}\text{C}$  =  $6 - 12 = -6^{\circ}\text{C}$

Rise by  $7^{\circ}\text{C}$  =  $-6 + 7 = 1^{\circ}\text{C}$

Temperature at 8 PM =  **$1^{\circ}\text{C}$**

**4. Verify that**

$$a \div (b+c) \neq (a \div b) + (a \div c)$$

for each of the following values of  $a, b$  and  $c$ .

a.  $a=8, b=4, c=2$

**Solution:** For equation

$$a \div (b+c) \neq (a \div b) + (a \div c) \quad a \div (b+c) \neq (a \div b) + (a \div c)$$

L.H.S

$$\begin{aligned} &= a \div (b+c) = a \div (b+c) \\ &= 8 \div (-4+2) = 8 \div (-4+2) \\ &= 8 \div (-2) = 8 \div (-2) \\ &= -4 = -4 \end{aligned}$$

R.H.S

$$\begin{aligned} &= (a \div b) + (a \div c) = (a \div b) + (a \div c) \\ &= (8 \div -4) + (8 \div 2) = (8 \div -4) + (8 \div 2) \\ &= -2 + 4 = -2 + 4 \\ &= 2 = 2 \end{aligned}$$

Hence,  $L.H.S \neq R.H.S$  .

Thus,

$$a \div (b+c) \neq (a \div b) + (a \div c) \quad a \div (b+c) \neq (a \div b) + (a \div c)$$

for  $a=8, b=4, c=2$  .

$$b. \quad a=-15, b=2, c=1 \quad a=-15, b=2, c=1$$

**Solution:** For equation

$$a \div (b+c) \neq (a \div b) + (a \div c) \quad a \div (b+c) \neq (a \div b) + (a \div c)$$

L.H.S

$$\begin{aligned} &= a \div (b+c) = a \div (b+c) \\ &= -15 \div (2+1) = -15 \div (2+1) \\ &= -15 \div 3 = -15 \div 3 \\ &= -5 = -5 \end{aligned}$$

R.H.S

$$\begin{aligned}
 &= (a \div b) + (a \div c) = (a \div b) + (a \div c) \\
 &= (-15 \div 2) + (-15 \div 1) = (-15 \div 2) + (-15 \div 1) \\
 &= -7.5 + (-15) = -7.5 + (-15) \\
 &= -22.5 = -22.5
 \end{aligned}$$

Hence, L.H.S  $\neq$  R.H.S. L.H.S  $\neq$  R.H.S

Thus,

$$a \div (b+c) \neq (a \div b) + (a \div c) \quad a \div (b+c) \neq (a \div b) + (a \div c)$$

for  $a = -15, b = 2, c = 1$   $a = -15, b = 2, c = 1$  .

**5. In a CET Examination (+2)(+2) marks are given for every correct answer and (-0.5)(-0.5) marks are given for every wrong answer and 00 for non-attempting any question.**

a. Likitha scores 3030 marks. If she got 2020 correct answers, how many questions she has attempted incorrectly?

**Solution:** Marks obtained for 11 correct answer  $= +2 = +2$

Marks obtained for 11 wrong answer  $= -0.5 = -0.5$

So, Marks scored by Likitha = 3030

Marks obtained by 2020 correct answers  $= 20 \times 2 = 40 = 20 \times 2 = 40$

Marks obtained for incorrect answer  $=$  Total score  $-$  Marks obtained by 2020 correct answer

$$= 30 - 40 = 30 - 40$$

$$= -10 = -10$$

Marks obtained for 11 wrong answer  $= -0.5 = -0.5$

$$\therefore \therefore \text{The number of incorrect answers} = -10 \div -0.5 = -10 \div -0.5$$

$$= 20 = 20$$

Hence, she attempted 2020 questions wrongly.

b. Saara scores -4-4 marks if she got 33 correct answers. How many were incorrect?

Ans: Marks obtained for 11 correct answer  $=+2=+2$

Marks obtained for 11 wrong answer  $=-0.5=-0.5$

So, Marks scored by Saara  $=-4=-4$

Marks obtained for 3 correct answers  $=3\times 2=6=3\times 2=6$

Marks obtained for incorrect answers  $=$  Total score  $-$  Marks obtained for 33 correct answer

$$=-4-6=-10=-4-6=-10$$

Marks obtained for 1 wrong answer  $=-0.5=-0.5$

$$\therefore \text{The number of incorrect questions } =-10-0.5=-10-0.5$$

$$=20=20$$

Hence, 2020 questions were incorrect.

## Benefits of Solving Important Questions for Class 7 Maths Chapter 1

Solving important questions for Class 7 Maths Chapter 1 Integers provide several benefits that can greatly enhance a student's understanding and mastery of the subject. Here are some key benefits:

- **Understanding Core Concepts:** These questions are created to reinforce the fundamental concepts of integers, such as properties of addition and subtraction, closure properties, commutative, and associative properties. By solving them, students can deepen their understanding of these concepts and their applications.
- **Enhanced Problem-Solving Skills:** These questions often require students to apply multiple concepts and properties of integers to solve problems. This helps in developing critical thinking and analytical skills as students learn to approach problems logically and methodically.
- **Building a Strong Foundation:** Consistently solving important questions builds a solid mathematical foundation. This is important for mastering more complex topics introduced

in later grades. A strong foundation in integers ensures that students can handle subsequent chapters in mathematics with greater ease.

- **Preparation for Exams:** These questions are selected to cover a wide range of topics within the chapter, making them excellent for exam preparation.
- **Self-Assessment:** By solving these questions, students can self-assess their understanding and identify areas where they need improvement. This self-assessment is crucial for targeted study and revision, allowing students to focus on their weaknesses and strengthen their grasp on difficult topics.
- **Improves Speed and Accuracy:** Regular practice with these questions helps students improve their calculation speed and accuracy. It helps them become more proficient in applying mathematical rules, which is essential for timed exams.