

Worksheet – Set 2

Chapter 10: The Other Side of Zero | Integers

Name: _____

Class: _____

Section: _____

Date: _____

Roll No.: _____

Marks (out of 55): _____

Instructions: Attempt all questions. Write '+' or '-' sign with every non-zero integer answer. Show your working in the space given.

Section A: Fill in the blanks (10 × 1 = 10 marks)

- When negative numbers are included, the number ray gets completed into a number _____.
- A positive token and a negative token that cancel each other form a _____ pair.
- The additive inverse of -25 is _____.
- $(+13) + (-13) =$ _____.
- A debit entry in a bank passbook is shown by a _____ number.
- $(-12) + (-5) =$ _____.
- The integer that comes just before -10 (to its left) is _____.
- $(+15) - (+23) =$ _____.
- Temperature is measured in degrees _____.
- $(-14) - (-14) =$ _____.

Section B: Multiple Choice Questions – tick the correct option (10 × 1 = 10 marks)

- Which pair of integers are additive inverses of each other?
 (a) 3 and $\frac{1}{3}$ (b) -6 and +6
 (c) -2 and -2 (d) 0 and 1
- $(-9) + (-6) =$
 (a) -3 (b) +3
 (c) -15 (d) +15
- Which of these statements is correct?
 (a) $-3 > -1$ (b) $-8 < -5$
 (c) $0 < -4$ (d) $-2 > 6$
- $(+14) - (-6) =$
 (a) +8 (b) -8
 (c) +20 (d) -20
- A lift is at Floor -2 and you press +5. It will reach:
 (a) -7 (b) +3
 (c) -3 (d) +7
- How many integers lie between -3 and +3 (not counting -3 and +3)?
 (a) 4 (b) 5
 (c) 6 (d) 7

7. Which expression is the same as $(-5) - (+3)$?
 (a) $(-5) + (+3)$ (b) $(-5) + (-3)$
 (c) $(+5) + (-3)$ (d) $(+5) + (+3)$
8. In the token model, 4 positive tokens and 7 negative tokens together show:
 (a) +3 (b) -3
 (c) +11 (d) -11
9. Mount Everest is 8848 m above sea level. This can be written as:
 (a) -8848 m (b) +8848 m
 (c) 0 m (d) 8848 - m
10. The value of $(-20) + (+35)$ is:
 (a) -15 (b) +15
 (c) +55 (d) -55

Section C: True or False ($10 \times 1 = 10$ marks)

1. Zero is greater than every negative integer. (True / False): _____
2. $(-6) - (-6) = -12$. (True / False): _____
3. On the number line, the number 4 units to the left of 1 is -3. (True / False): _____
4. The sum of two negative integers is always negative. (True / False): _____
5. $(+9) + (-2) = -7$. (True / False): _____
6. -20 is greater than -2. (True / False): _____
7. The additive inverse of a positive integer is a negative integer. (True / False): _____
8. A bank balance can never become negative. (True / False): _____
9. $(+3) - (+8) = -5$. (True / False): _____
10. Adding zero pairs to a set of tokens changes its value. (True / False): _____

Section D: Match the following ($5 \times 1 = 5$ marks)

No.	Column A		Column B	Answer
1.	Sum of a number and its additive inverse	a.	-5	
2.	$(-8) + (+3)$	b.	China (Nine Chapters)	
3.	Height of a place below sea level	c.	+7	
4.	$(-2) - (-9)$	d.	A negative number	
5.	Ancient text that used red and black rods for numbers	e.	0	

Section E: Solve the following ($10 \times 2 = 20$ marks)

1. $(+18) + (+27)$

2. $(-16) + (-9)$

3. $(+7) + (-15)$

4. $(-11) + (+25)$

5. $(+10) - (+25)$

6. $(-6) - (-15)$

7. $(+3) - (-12)$

8. $(-8) - (+8)$

9. Write all the integers between -12 and -6 in increasing order.

10. Fill in the boxes with $<$ or $>$: (a) -14 $\square$ -4 (b) 0 $\square$ -9 (c) $+5$ $\square$ -15

ANSWER KEY – Worksheet Set 2**Section A: Fill in the blanks**

1.	line	2.	zero
3.	+25	4.	0
5.	negative	6.	-17
7.	-11	8.	-8
9.	Celsius	10.	0

Section B: Multiple Choice Questions

1.	(b) -6 and +6	2.	(c) -15
3.	(b) $-8 < -5$	4.	(c) +20
5.	(b) +3	6.	(b) 5
7.	(b) $(-5) + (-3)$	8.	(b) -3
9.	(b) +8848 m	10.	(b) +15

Section C: True or False

1.	True	2.	False
3.	True	4.	True
5.	False	6.	False
7.	True	8.	False
9.	True	10.	False

Section D: Match the following

1 → e 2 → a 3 → d 4 → c 5 → b

Section E: Solve the following

- $(+18) + (+27) = +45$
- $(-16) + (-9) = -25$
- $(+7) + (-15) = -8$
- $(-11) + (+25) = +14$
- $(+10) - (+25) = (+10) + (-25) = -15$
- $(-6) - (-15) = (-6) + (+15) = +9$
- $(+3) - (-12) = (+3) + (+12) = +15$
- $(-8) - (+8) = (-8) + (-8) = -16$
- 11, -10, -9, -8, -7
- $-14 < -4$; $0 > -9$; $+5 > -15$