

Worksheet – Set 3

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)

- The numbers 1, 2, 3, 4, ... are called _____ integers.
- On the number line, the integer 8 units to the left of 3 is _____.
- $(-18) + (+30) =$ _____.
- $(+25) + (-40) =$ _____.
- Levels below the ground in a mine are shown by _____ numbers.
- $(-7) - (+2) =$ _____.
- $(+5) - (-5) =$ _____.
- Brahmagupta gave his rules for integers in the year _____ CE.
- Subtracting -7 from 12 is the same as adding _____ to 12.
- In the lift, if you press $+6$ and then -6 from Floor 0, you will be on Floor _____.

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

- Which list shows the integers in ascending order?
(a) $-1, -5, 0, 3$ (b) $-5, -1, 0, 3$
(c) $3, 0, -1, -5$ (d) $0, -1, -5, 3$
- $(-13) + (+5) =$
(a) $+8$ (b) -18
(c) -8 (d) $+18$
- $(+9) - (+15) =$
(a) $+6$ (b) -6
(c) $+24$ (d) -24
- The additive inverse of -543 is:
(a) -543 (b) 543
(c) 0 (d) $1/543$
- Starting at 2 on the number line, if you move 6 steps to the left you reach:
(a) 8 (b) -4
(c) 4 (d) -8
- The temperature falls from 5°C to -3°C . The change in temperature is:
(a) $+2^{\circ}\text{C}$ (b) -2°C
(c) -8°C (d) $+8^{\circ}\text{C}$

7. Which of the following is the same as $7 - (-3)$?
 (a) $7 - 3$ (b) $7 + 3$
 (c) $-7 + 3$ (d) $-7 - 3$
8. The sum of (-4) , $(+9)$ and (-7) is:
 (a) -2 (b) $+2$
 (c) -12 (d) $+20$
9. The smallest integer greater than -5 is:
 (a) -6 (b) -4
 (c) 0 (d) -5
10. A diver at -12 m dives 8 m deeper. Her new position is:
 (a) -4 m (b) -20 m
 (c) $+20$ m (d) $+4$ m

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

1. Negative integers continue endlessly towards the left on the number line. (True / False): _____
2. $(-15) + (-15) = 0$. (True / False): _____
3. -1 is the smallest integer. (True / False): _____
4. $(+12) - (+12) = 0$. (True / False): _____
5. In a lift, pressing $+2$ and then -5 takes you 3 floors down. (True / False): _____
6. As per Brahmagupta, the sum of any number and zero is the number itself. (True / False): _____
7. $(-4) - (+6) = +2$. (True / False): _____
8. -11 lies between -12 and -10 . (True / False): _____
9. A temperature of -5°C is warmer than 0°C . (True / False): _____
10. $(-3) - (-8) = +5$. (True / False): _____

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

No.	Column A		Column B	Answer
1.	$(-10) + (+4)$	a.	-6	
2.	$(+6) - (+11)$	b.	-5	
3.	Additive inverse of -9	c.	$+9$	
4.	$(-17) + (+17)$	d.	0	
5.	Number to be reached to win the integer Snakes and Ladders game	e.	-50 or $+50$	

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

1. $(+34) + (+16)$

2. $(-21) + (-19)$

3. $(-30) + (+12)$

4. $(+45) + (-60)$

5. $(+17) - (+9)$

6. $(-13) - (-20)$

7. $(-5) - (+15)$

8. $(+8) - (-22)$

9. Write all the integers between -20 and -14 in increasing order.

10. Evaluate: $(-6) + (+10) - (-3)$.

ANSWER KEY – Worksheet Set 3**Section A: Fill in the blanks**

1.	positive	2.	-5
3.	+12	4.	-15
5.	negative	6.	-9
7.	+10	8.	628
9.	+7	10.	0

Section B: Multiple Choice Questions

1.	(b) -5, -1, 0, 3	2.	(c) -8
3.	(b) -6	4.	(b) 543
5.	(b) -4	6.	(c) -8 °C
7.	(b) 7 + 3	8.	(a) -2
9.	(b) -4	10.	(b) -20 m

Section C: True or False

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

Section D: Match the following

1 → a 2 → b 3 → c 4 → d 5 → e

Section E: Solve the following

- $(+34) + (+16) = +50$
- $(-21) + (-19) = -40$
- $(-30) + (+12) = -18$
- $(+45) + (-60) = -15$
- $(+17) - (+9) = (+17) + (-9) = +8$
- $(-13) - (-20) = (-13) + (+20) = +7$
- $(-5) - (+15) = (-5) + (-15) = -20$
- $(+8) - (-22) = (+8) + (+22) = +30$
- 19, -18, -17, -16, -15
- $(-6) + (+10) = +4$; then $(+4) - (-3) = (+4) + (+3) = +7$