Subtraction of Integers

A. Choose the Correct Answer:

1. What is the value of (–6) – (–3)?
   a) –9   b) –3
   c) –1   d) –6

2. Which of the following gives the smallest result?
   a) (–2) – (+5)   b) (+2) – (–5)
   c) (–2) – (–5)   d) (+5) – (–2)

3. What is the result of (–4) – (+7)?
   a) +3   b) –11
   c) –3   d) +11

4. The value of (+10) – (–5) is:
   a) +5   b) –15
   c) +15   d) –5

5. If you subtract –8 from –3, what do you get?
   a) –11   b) +5
   c) –5   d) +11

B. Write the Missing Terms to Complete the Sentences:

1. (–10) – (–5) = _____

2. Subtracting a negative integer is same as _____ a positive integer.

3. (+7) – (–3) = _____

4. When a larger number is subtracted from a smaller number, the result is a _____ integer.

5. (–6) – (+2) = _____

C. Figure out the answers to these questions:

1. **Use a number line to solve:** (+3) – (+5)

2. **Find the value:** (–12) – (–4)

3. Reena had ₹8. She spent ₹12. Represent this using integers and find how much money she has now.

4. **Evaluate:** (–9) – (+6)

5. Find the result when –15 is subtracted from +6.

6. Write two real-life examples of situations that involve subtraction of integers.

7. If the temperature was –4°C in the morning and it decreased by 5°C, what is the new temperature?

8. Find the value of the expression: (–5) – (–8) – (+3)

D. Mark each sentence with a True (✓) or False (✗):

1. Subtracting a positive integer means moving right on the number line.

2. (–3) – (–3) is equal to zero.

3. Subtracting zero from any integer changes its value.

4. Subtracting a negative number gives a higher value.

5. (+5) – (+8) results in a negative integer.

E. Challenge yourself with these questions:

1. A submarine is at –20 meters. It dives 15 meters deeper. Represent the situation using integers and find the new depth.

2. **Solve:** (–7) – (+5)

3. A hiker is at an altitude of 100 m. He descends to –50 m. What is the total change in his height?

4. **Fill in the blank to make the statement true:** (–3) – _____ = –10

5. On a number line, show the result of (+6) – (–2)

F. Arrange the following in ascending order:

1. –12, –6, 7, 5, 0, –9   2. –8, 5, –2, +2, 0, 7

3. –19, 15, 10, –7, 8, 1, –2   4. –10, 6, –1, 3, –5, 7

G. Arrange the following in descending order.

1. –2, 5, –1, 0, 8   2. 7, –3, –4, + 0, 4, –10

3. –10, 6, –2, 4, –6, 8   4. –15, 10, 8, –7, 0, 3