

Grade 8 Rationalized Mathematics

Notes

Strand 1.0 Numbers

Sub-Strand 1.1 Integers

Representation of Integers on a Number Line

- **Integers** include all whole numbers and their negatives: ..., -3, -2, -1, 0, 1, 2, 3, ...
- **Positive integers** are greater than zero (e.g., 1, 2, 3...) and usually represent gains, heights above sea level, deposits, or temperatures above zero.
- **Negative integers** are less than zero (e.g., -1, -2, -3...) and often represent losses, depths below sea level, withdrawals, or temperatures below zero.
- **Zero (0)** represents a neutral or starting point; it separates positive and negative numbers.

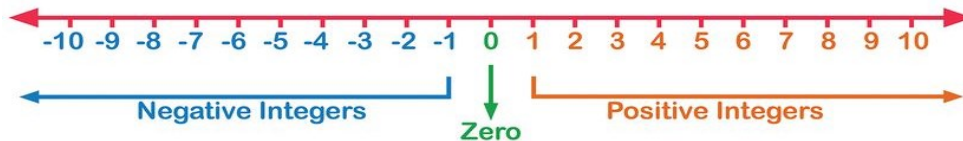
Examples of Real-Life Use:

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2026 Rationalized Scheme of Work,
notes, lesson plan Exam latest

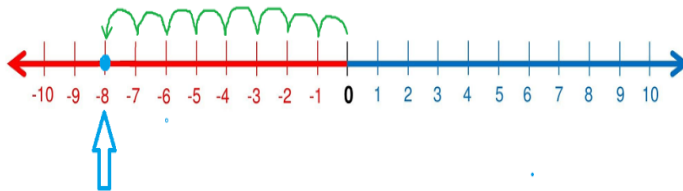
Representing on a Number Line:

- Draw a straight horizontal line and mark equal intervals.
- Place **zero (0)** at the center.
- Numbers to the **right** of 0 are positive.
- Numbers to the **left** of 0 are negative.



Example:

To represent -8:



Addition of Integers on a Number Line

- Start at the first number on the line.
- Move **right** when adding a positive number.
- Move **left** when adding a negative number.

Example 1:

Add $1 + 2$

- Start at 1 on the number line.
- Move 2 steps to the right $\rightarrow$ reach 3.
- **Answer: 3**