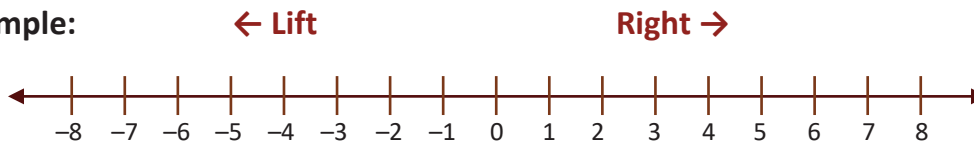


Patterns of Numbers on the Number

A number line is a straight line with numbers placed at equal distances. It helps in understanding number patterns, addition, subtraction, and comparing numbers easily.

Example:



Here, negative numbers are on the left, positive numbers are on the right, and zero (0) is in the middle.

1. Skip Counting on a Number Line

Skip counting is jumping numbers by a fixed step on a number line.

Example:

- **Skip counting by 2:** 0, 2, 4, 6, 8, 10, ...
- **Skip counting by 5:** 0, 5, 10, 15, 20, ...

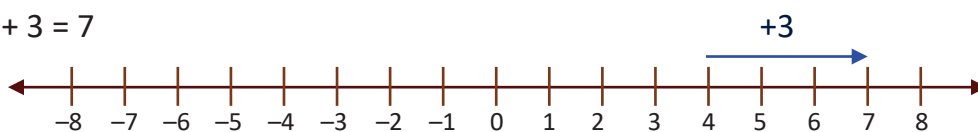
Trick: If you skip count by a number, you get its multiples!

2. Addition and Subtraction on a Number Line

- **Addition:** Move right on the number line.
- **Subtraction:** Move left on the number line.

Example:

$$4 + 3 = 7$$



→ → → (Move 3 steps right)

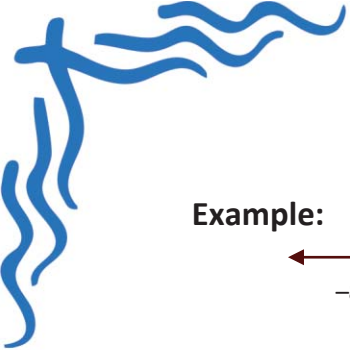
$$7 - 2 = 5$$



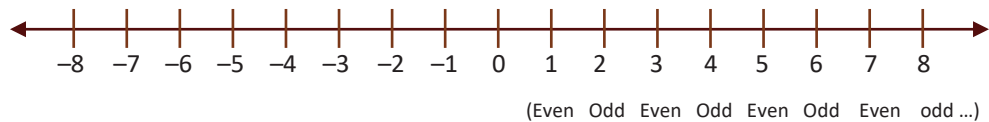
← ← (Move 2 steps left)

3. Even and Odd Numbers on the Number Line

- **Even numbers** (0, 2, 4, 6, 8, ...) appear at equal intervals.
- **Odd numbers** (1, 3, 5, 7, 9, ...) appear between even numbers.



Example:



4. Prime and Composite Numbers on the Number Line

- **Prime Numbers** (2, 3, 5, 7, 11, ...) appear irregularly.
- **Composite Numbers** (4, 6, 8, 9, 10, ...) are more frequent.

Example:



(P = Prime, C = Composite)

5. Patterns in Multiplication on a Number Line

- **Multiples of 3:** 3, 6, 9, 12, 15, ... (Move in jumps of 3)
- **Multiples of 4:** 4, 8, 12, 16, 20, ... (Move in jumps of 4)

Example (Multiples of 5 on a Number Line)



Trick: Multiples always form regular gaps on the number line!