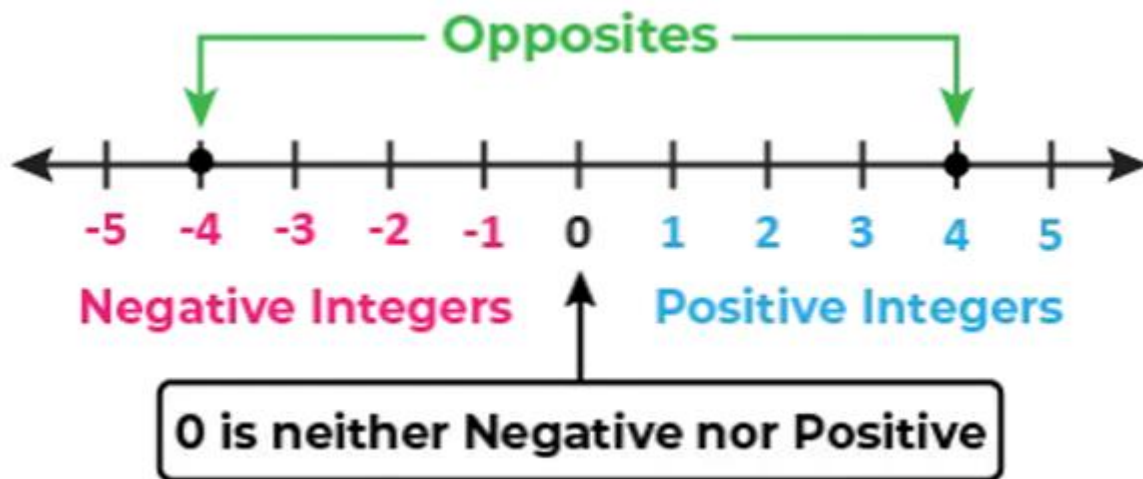


Topic: Integers

Integers:

An integer is a number without a fractional part. Integers include whole numbers, both positive and negative, as well as zero. For example, -5, 0, and 12 are all integers, while 3.14 , $\frac{1}{2}$, and $\sqrt{2}$ are not.



Zero:

Zero is a special integer that represents the neutral point on the number line. It is neither positive nor negative and serves as the additive identity, meaning that any integer added to zero remains unchanged. In mathematical notation, it is denoted by "0."

Positive Integers

Positive integers are numbers greater than zero. They are represented with or without a positive sign and form an infinite sequence that extends to the right on the number line. In mathematical notation, positive integers are denoted as $(+1, +2, +3, \dots)$.

Negative Integers

Negative integers are numbers less than zero. They are represented with a negative sign and form an infinite sequence that extends to the left on the number line. In mathematical notation, negative integers are denoted as $(-1, -2, -3, \dots)$.

Rules of adding and subtracting integers:

- When signs of both integers are same, we add and answer takes the sign of greater integer. For example, the sum of -3 and -7 is -10
- When signs of both integers are different then we subtract and answer takes the sign of greater integer. For example, $-3+7= +4$