Positive and Negative Rational Numbers

Positive Rational Numbers:

Definition: Positive rational numbers are numbers that can be expressed as a ratio or fraction of two integers, where the numerator (top part) is a positive integer, and the denominator (bottom part) is a positive integer.

Examples:

- i. 1/2
- **ii.** 3/4
- **iii.** 5/6

Properties:

- i. When you multiply two positive rational numbers, the result is still a positive rational number.
- ii. When you divide one positive rational number by another, the result is still a positive rational number.
- iii. Positive rational numbers can be added or subtracted using the rules of fractions.

Negative Rational Numbers:

Definition: Negative rational numbers are numbers that can be expressed as a ratio or fraction of two integers, where the numerator (top part) is a negative integer, and the denominator (bottom part) is a positive integer.

Examples:

i.	-1/2
ii.	-3/4
iii.	-5/6

Properties:

- i. When you multiply a negative rational number by a positive rational number, the result is a negative rational number.
- **ii.** When you divide a negative rational number by a positive rational number, the result is a negative rational number.
- iii. Negative rational numbers can be added or subtracted using the rules of fractions.

Zero:

Zero (0) is neither a positive nor a negative rational number. It is considered a separate category.

Representation on the Number Line:

- i. Positive rational numbers are represented to the right of 0 on the number line.
- **ii.** Negative rational numbers are represented to the left of 0 on the number line.
- iii. 0 is the origin (center) of the number line.