Introduction to Fraction

Understanding Introduction to Fraction

- A fraction is a part of a whole.
- It is written in the form $\frac{a}{b}$, where a is the numerator and b is the denominator.
- Numerator tells how many parts are taken.
- Denominator tells how many equal parts the whole is divided into.
- Example: In $\frac{1}{4}$, the whole is divided into 4 parts and 1 part is taken.
- Fractions are used in everyday life like cutting cake, sharing chocolates, or measuring liquids.

Types of Fractions

- **Proper Fraction:** Numerator < Denominator (e.g., $\frac{3}{5}$)
- **Improper Fraction:** Numerator ≥ Denominator (e.g., $\frac{7}{4}$)
- **Unit Fraction:** Numerator = 1 (e.g., $\frac{1}{2}, \frac{1}{6}$)
- **Like Fractions:** Same denominator (e.g., $\frac{2}{5}$ and $\frac{3}{5}$)
- **Unlike Fractions:** Different denominators (e.g., $\frac{1}{3}$ and $\frac{2}{5}$)

Mixed Examples with Solutions

Example: Write 3 parts out of 4 as a fraction

Solution: 3 out of 4 = $\frac{3}{4}$

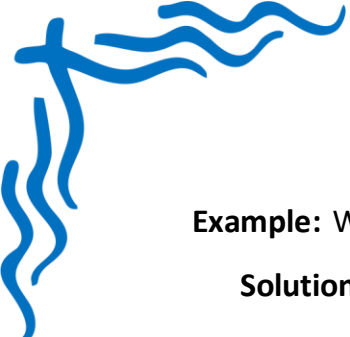**Example:** What is the numerator and denominator of $\frac{5}{6}$?

Solution: Numerator = 5, Denominator = 6

Example: Shade $\frac{1}{2}$ of a rectangle

Solution: Divide the rectangle into 2 equal parts and shade 1 part

Example: Is $\frac{7}{3}$ a proper or improper fraction?

Solution: 7 > 3 → Improper fraction

Example: Which is a unit fraction: $\frac{3}{4}$ or $\frac{1}{5}$?

Solution: $\frac{1}{5}$ is a unit fraction because numerator = 1

Summary Points

- A fraction shows a part of a whole.

- It is written as numerator/denominator.

- Proper, improper, and unit fractions describe different parts.

- Fractions are used in daily life to show equal sharing.

- Understanding parts of a fraction helps in comparing, adding, and subtracting fractions later.