Mixed Fraction

A Mixed Fraction is a number that has:

- A whole number and
- A proper fraction (numerator < denominator)

Examples:

- $1\frac{1}{2}$ → One whole and one-half
- $3\frac{2}{5}$ → Three wholes and two-fifths
- $5\frac{3}{4}$ → Five wholes and three-fourths

Conversion:

Mixed to Improper Fraction

Step:

Multiply whole number × denominator → Add numerator → Keep same denominator

Example:

$$2\frac{1}{3} = \frac{2 \times 3 + 1}{3} = \frac{7}{3}$$

Improper to Mixed Fraction

Step:

Divide numerator ÷ denominator

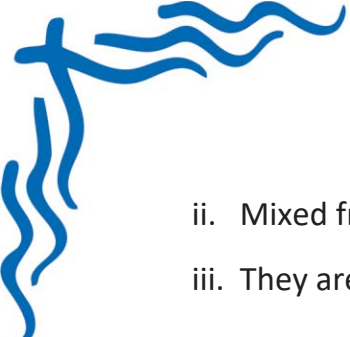Quotient = whole number, Remainder = numerator of the fraction

Example:

$$\frac{9}{4} = 2\frac{1}{4}$$

Properties of Mixed Fractions

i. A mixed fraction is always more than 1

Example: $1\frac{2}{5} > 1$

ii. Mixed fractions can be converted to improper fractions and vice versa

iii. They are used in measurements like length, weight, and time

Example: $2\frac{1}{2}$ kg, $3\frac{3}{4}$ hours

iv. Mixed fractions can be added or subtracted by first converting to improper fractions

v. Mixed fractions show both whole and part of a quantity

Summary:

- Mixed Fraction = Whole number + Proper Fraction

  Example: $4\frac{1}{3}$

- Useful for daily life – shopping, cooking, measurements

- Can be changed to improper fractions for calculations