

TYPES OF FRACTIONS

Simple Fractions or Common Fractions

A simple fraction is a fraction in which the numerator and denominator are both integers.

Examples:

$$\frac{2}{5}, \frac{7}{2}, -\frac{7}{8}, \frac{-9}{1}$$

Proper Fractions

A proper fraction is a fraction in which the numerator is less than the denominator.

Examples:

$$\frac{1}{3}, \frac{2}{5}, -\frac{2}{9}$$

Improper Fractions

An improper fraction is a fraction in which the numerator is equal to or greater than the denominator.

Examples:

$$\frac{7}{3}, \frac{13}{13}, \frac{-12}{5}$$

Mixed Numbers

A mixed number is a number that is a combination of an integer and a proper fraction.

Examples:

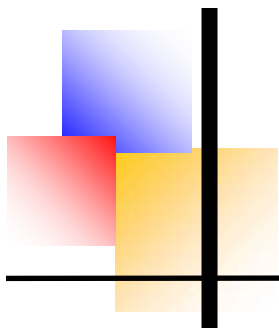
$$2\frac{3}{5}, 5\frac{7}{8}, -7\frac{2}{3}$$

Zero Fraction

A zero fraction is a fraction in which the numerator is zero. A zero fraction is equal to zero.

Example:

$$\frac{0}{3} = 0$$



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Undefined Fraction

An undefined fraction is a fraction with a denominator of zero. It is not possible to divide a number by zero. Therefore, the fraction is undefined.

Example:

$\frac{3}{0}$ is an undefined fraction.

Reciprocal

A reciprocal is formed by flipping the fraction (i.e. dividing 1 by the fraction).

Examples:

1. Find the reciprocal of $\frac{1}{5}$

$\frac{5}{1}$ or 5 is the reciprocal of $\frac{1}{5}$

2. Find the reciprocal of $\frac{2}{3}$

$\frac{3}{2}$ is the reciprocal of $\frac{2}{3}$



Complex Fractions

A complex fraction is a fraction in which either one or both of the numerator and denominator are not integers.

Examples:

$\frac{0.3}{7}$, $\frac{27.8}{5.4}$, $\frac{x}{12}$, $\frac{x^2 + 4x + 7}{x + 3}$