

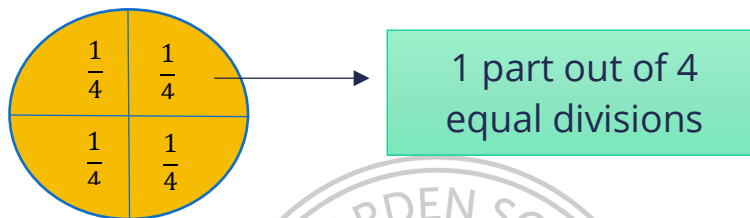


## CLASS NOTES

### Introduction

The word fraction derives from the Latin word “**Fractus**” meaning **broken**. It represents a ‘part of a whole’, consisting of a number of equal parts out of a whole.

Example: Slices of a pizza



### Representation of Fractions

A fraction is represented by two numbers separated by a line. The number on top of the line is the numerator and the number below is the denominator.

Example:  $\frac{3}{5}$  means 3 parts out of 5 equal divisions.

### Types of Fractions

**Proper Fractions:** The numerator is smaller than the denominator. Proper fractions are greater than 0 and less than 1.

Example:  $\frac{2}{5}$ ,  $\frac{1}{7}$ ,  $\frac{50}{58}$

**Improper Fractions:** The numerator is greater than or equal to the denominator. Improper fractions are greater than 1 or equal to 1.

Example:  $\frac{6}{5}$ ,  $\frac{20}{5}$

**Mixed Fractions:** Mixed fractions are a combination of a whole number and



a proper fraction.

Example:  $\frac{43}{5} = 8\frac{3}{5}$  (i.e.,  $\frac{(8 \times 5) + 3}{5} = \frac{43}{5}$ )

**Like Fractions:** Fractions with same denominator.

Example:  $\frac{1}{5}, \frac{6}{5}, \frac{3}{5}$

**Unlike Fractions:** Fractions with different denominators.

Example:  $\frac{1}{5}, \frac{6}{8}$

**Equivalent Fractions:** Fractions that have different numerators and denominators but are equal to the same value.

Example:  $\frac{2}{4}, \frac{4}{8}, \frac{3}{6}$  are equivalent fractions because they are equal to  $\frac{1}{2}$ .

