Ch-7 Fractions

Points to remember

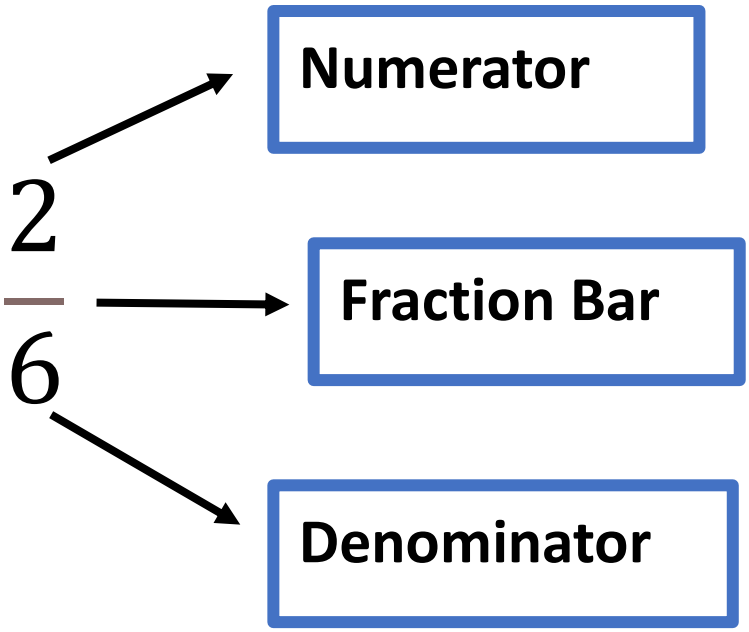
1) A fraction is a part of a whole.

2) It is of two parts;

(a) Numerator → Number of equal parts taken

(b) Denominator → Total equal parts of a whole

Example :- Pizza



Types of Fraction

There are six types of Fraction. They are;

(1) Proper Fraction → Those fraction whose numerator is less than the denominator are called proper fractions. Example:- $\frac{1}{2}, \frac{3}{6}, \frac{10}{20}$.

(2) Improper Fraction → Those fractions whose numerator is greater than or equal to the denominator are called improper fractions. Example:- $\frac{3}{2}, \frac{6}{6}, \frac{20}{12}$.

(3) Mixed Number → A mixed number is a combination of whole number and a proper fraction. Example :- $2\frac{1}{2}$, $4\frac{3}{6}$, $6\frac{10}{20}$.

(4) Unit Fraction → A fraction whose numerator is 1 is called a unit fraction. Example:- $\frac{1}{2}, \frac{1}{6}, \frac{1}{20}$.

(5) Like Fraction → A fraction whose denominators are same are called like fractions. Example:- $\frac{1}{6}, \frac{3}{6}, \frac{5}{6}$.

(6) Unlike Fraction → A fraction whose denominator are different are called unlike fractions. Example:- $\frac{4}{6}, \frac{3}{8}, \frac{12}{15}$.

Reduce to their simplest form

A fraction is in its simplest form when its numerator and denominator have no common factors other than 1.

Example:- $\frac{1}{2}, \frac{3}{5}, \frac{5}{8}$ are all in their simplest form.

Quick Assessment

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Reduce the following fractions to their simplest terms.

1. $\frac{15}{18}$ 2. $\frac{60}{105}$ 3. $\frac{84}{68}$ 4. $\frac{55}{60}$

Solution:-

1) $\frac{15}{18}$

Sol 1) $= \frac{\cancel{15}^{5}}{\cancel{18}_{6}}$

$= \frac{5}{6}$

2) $\frac{60}{105}$

Sol 2) $= \frac{\cancel{60}^{\cancel{12}^{4}}}{\cancel{105}_{\cancel{21}_{7}}}$

$= \frac{4}{7}$

3) $\frac{84}{68}$

Sol 3) $= \frac{\cancel{84}^{\cancel{42}^{21}}}{\cancel{68}_{\cancel{34}_{17}}}$

$= \frac{21}{17}$

In this Q4. is homework