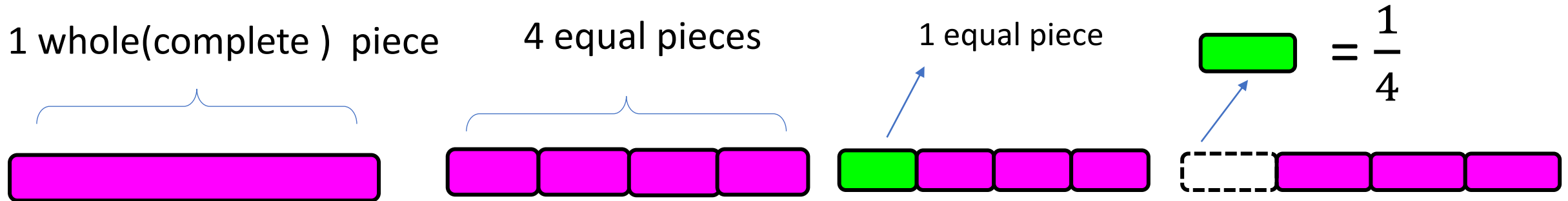


Chapter :- 5 Fractions

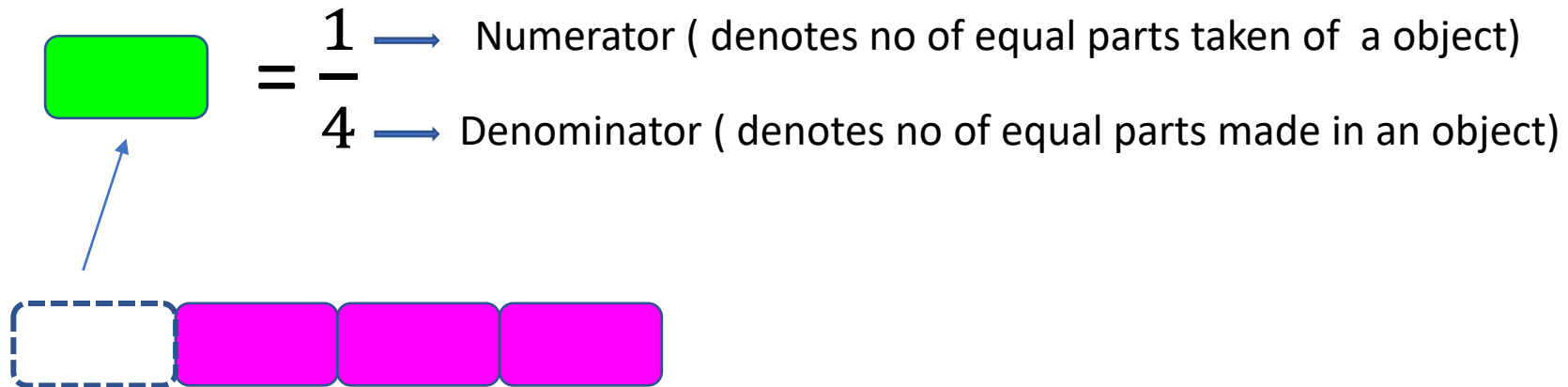
Definition : Fraction is a number representing part of a whole

Or

Fraction is a selected parts of equal number of parts of an object or a group



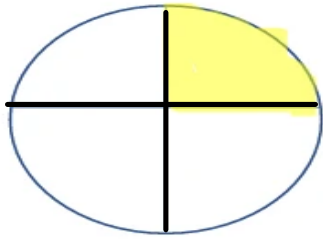
A fraction has two parts Numerator and Denominator



Types of Fractions

1. Proper Fraction : A fraction in which denominator is greater than numerator is called as proper fraction

Example :- $\frac{3}{5}$, $\frac{7}{9}$, $\frac{11}{15}$

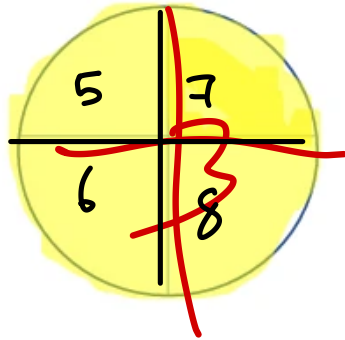
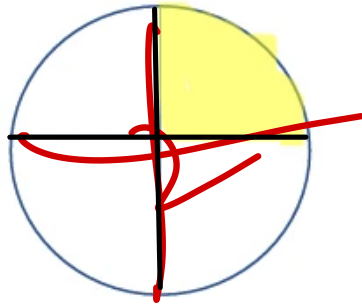
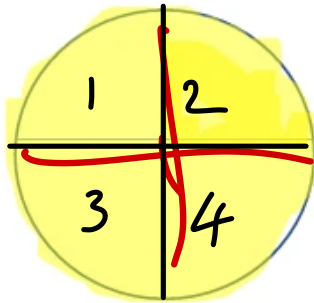


$$\frac{1}{4}$$

2. Improper Fraction : A fraction in which numerator is greater than denominator is called as improper fraction

Examples :- $\frac{5}{3}$, $\frac{9}{7}$, $\frac{15}{11}$

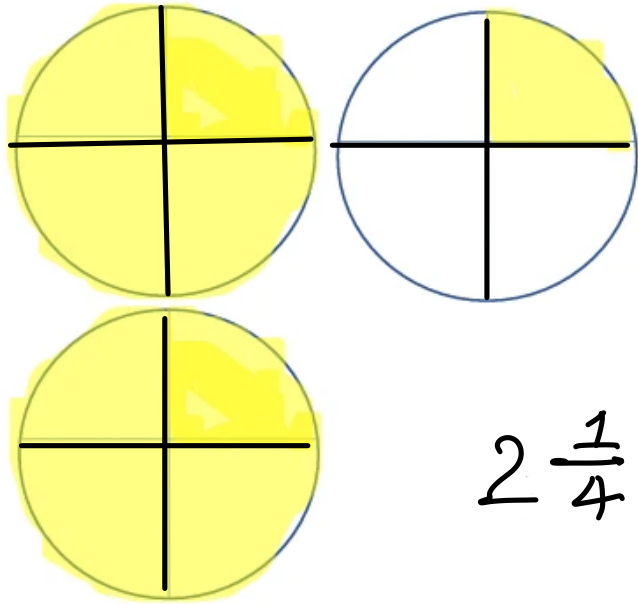
3



$$\frac{9}{4}$$

3. Mixed Fraction: A fraction which is a combination of a Whole number and a proper fraction is called as mixed fraction

Example: $5\frac{1}{2}$, $6\frac{3}{4}$, $7\frac{2}{5}$



4. Unit Fraction

A proper fraction having 1 as the numerator.

Example: $\frac{1}{3}$, $\frac{1}{5}$, $\frac{1}{20}$, $\frac{1}{25}$

5. Like Fractions

Fractions having the same denominator.

Example: $\frac{1}{5}$, $\frac{2}{5}$, $\frac{6}{5}$, $\frac{7}{5}$ are like fractions

6. Unlike Fractions

Fractions having different denominators.

Example: $\frac{2}{7}$, $\frac{3}{5}$, $\frac{2}{11}$, $\frac{5}{13}$
are unlike fractions

simplest form of a fraction : "The simplest form of a fraction is obtained by dividing (cancelling) the numerator and denominator by their common factors until no further division is possible. The fraction left at the end is called the simplest form."

Example: write the simplest form of $\frac{14}{21}$

Solution:- 14 and 21 are divisible by 7

$$\text{so, } \frac{\cancel{14}^2}{\cancel{21}_3} = \frac{2}{3}$$

So simplest form of $\frac{14}{21}$ is

$$\frac{2}{3}$$