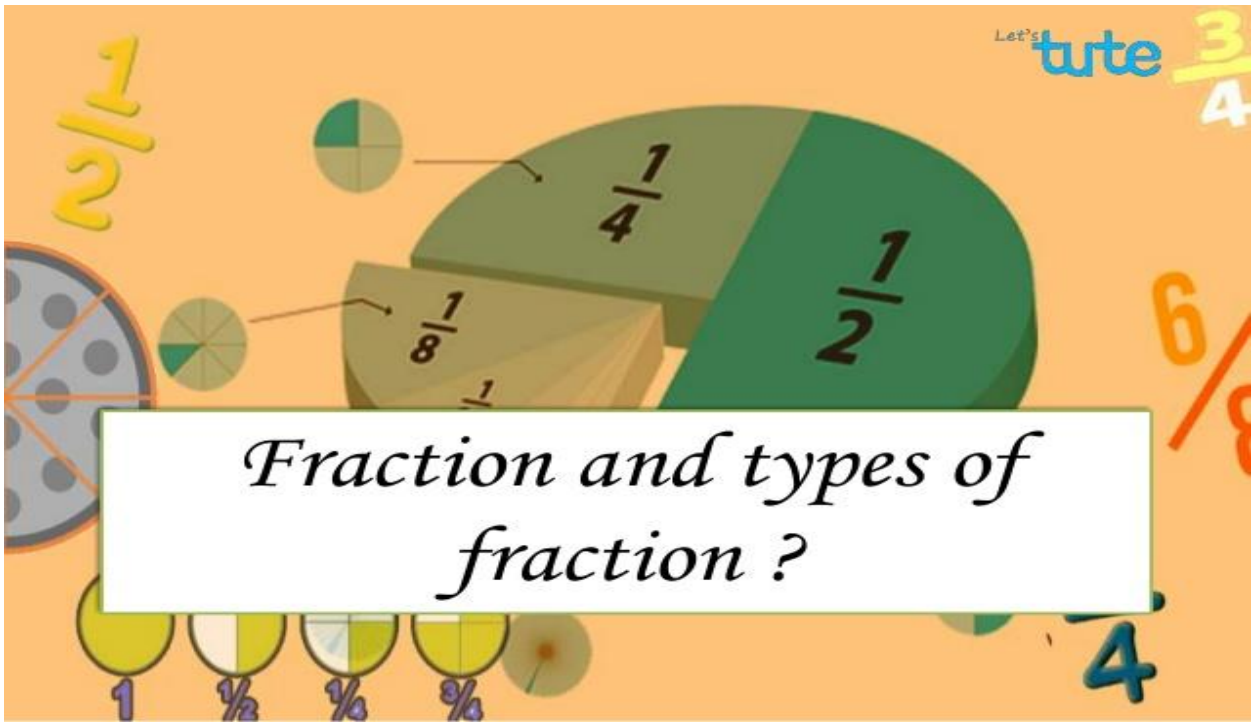
TOPIC: TYPES OF FRACTION



Let's tute

Numbers in this form are known as

Fraction

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

Fraction has two parts.

Let's tute

$\frac{a}{b} = \frac{\text{Top}}{\text{Bottom}}$

$\frac{a}{b} = \frac{\text{Numerator}}{\text{Denominator}}$

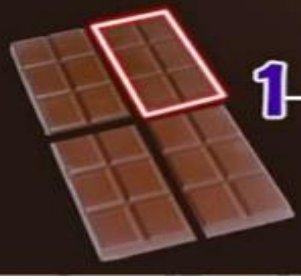
What is Numerators?

Let's tute

Numerators is the number of equal parts which have been taken out or which have been left out.

1

$\frac{1}{8}$



1 $\frac{1}{4}$

Fraction

$\frac{a}{b} = \frac{\text{Numerator}}{\text{Denominator}}$

Both the words are derived from Late Latin

What is Denominator?

Let's tute

Denominator is the total number of equal parts in which whole is divided into.

8 Equal parts

$\frac{1}{8}$

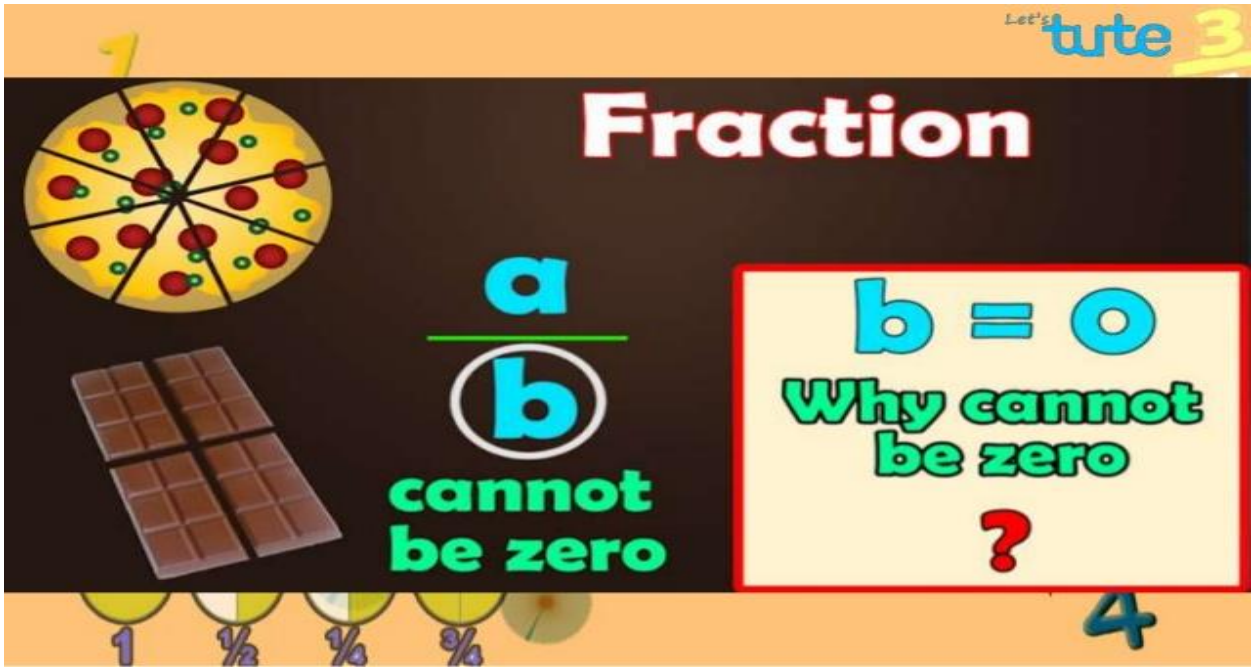
4 Equal parts

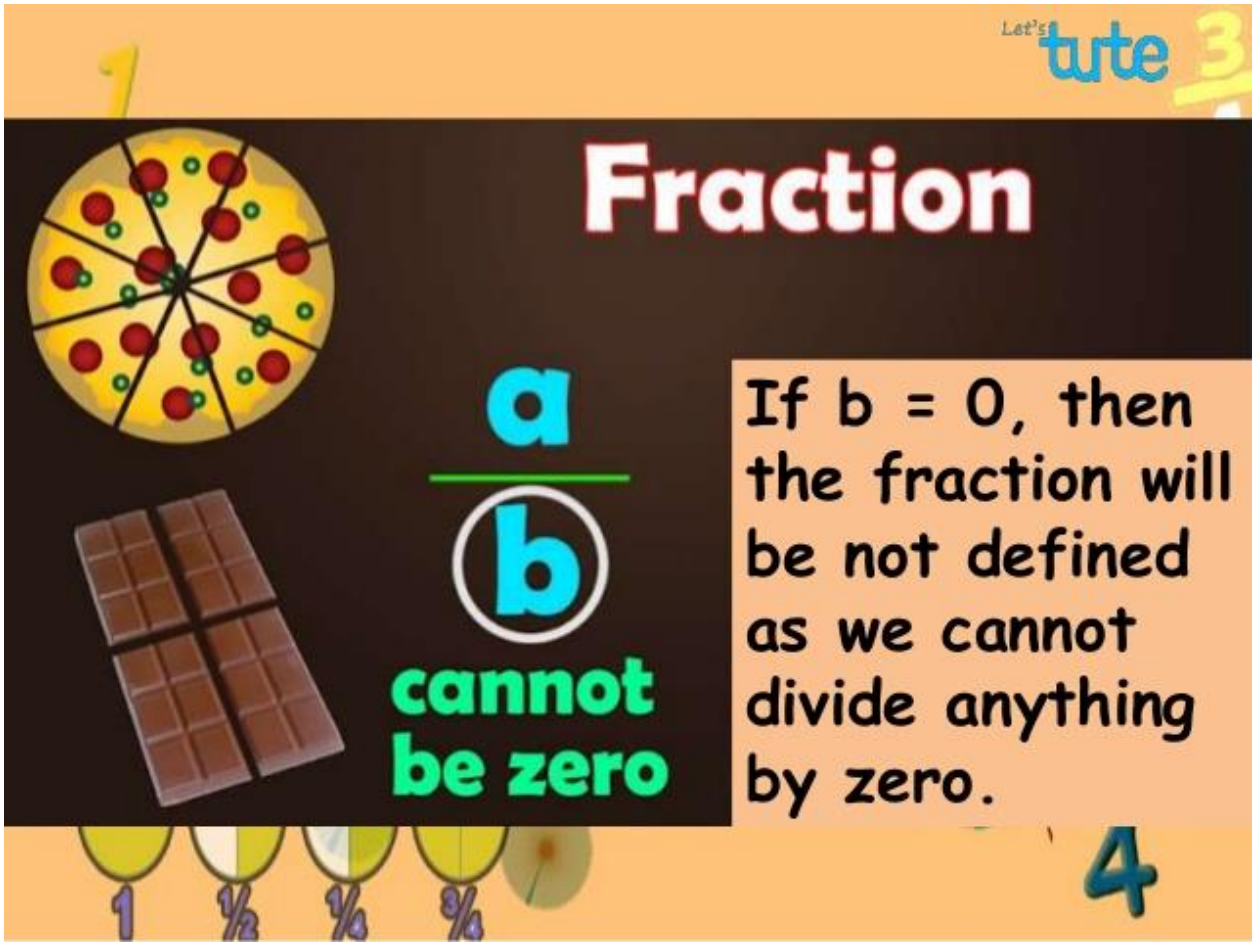
$\frac{1}{4}$

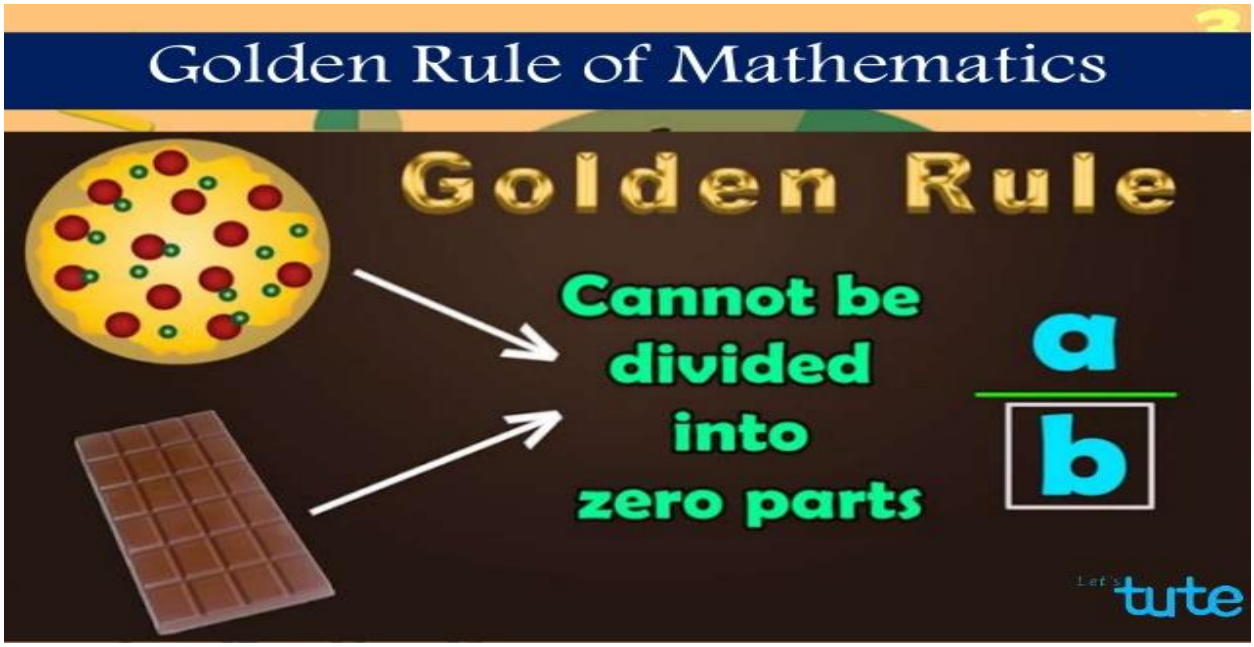
Fraction

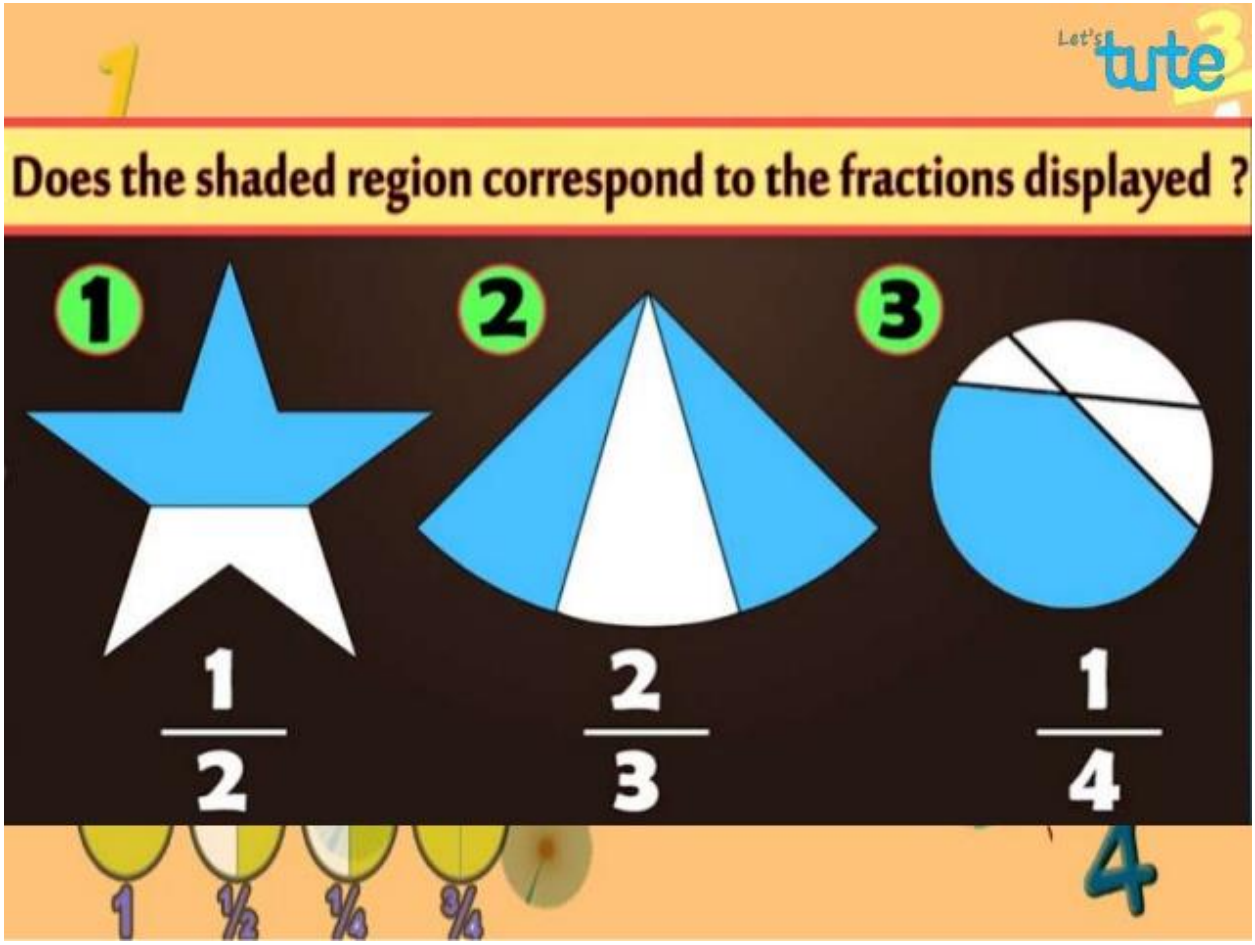
$\frac{a}{b} = \frac{\text{Numerator}}{\text{Denominator}}$

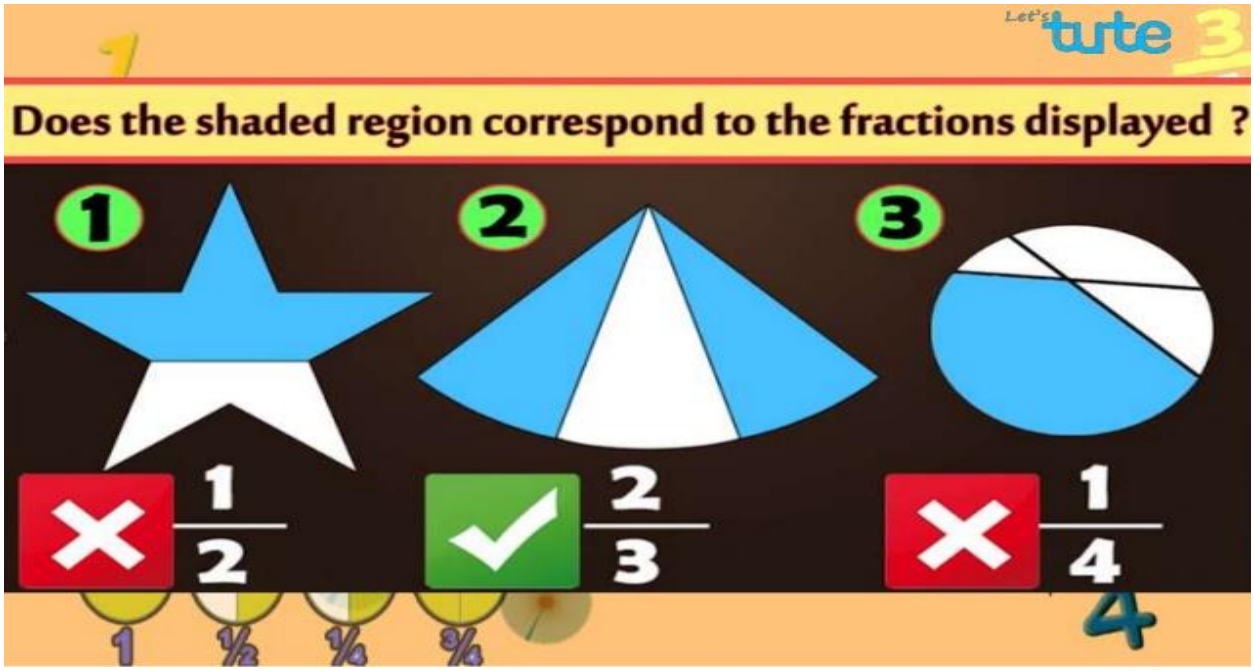
Both the words are derived from Late Latin

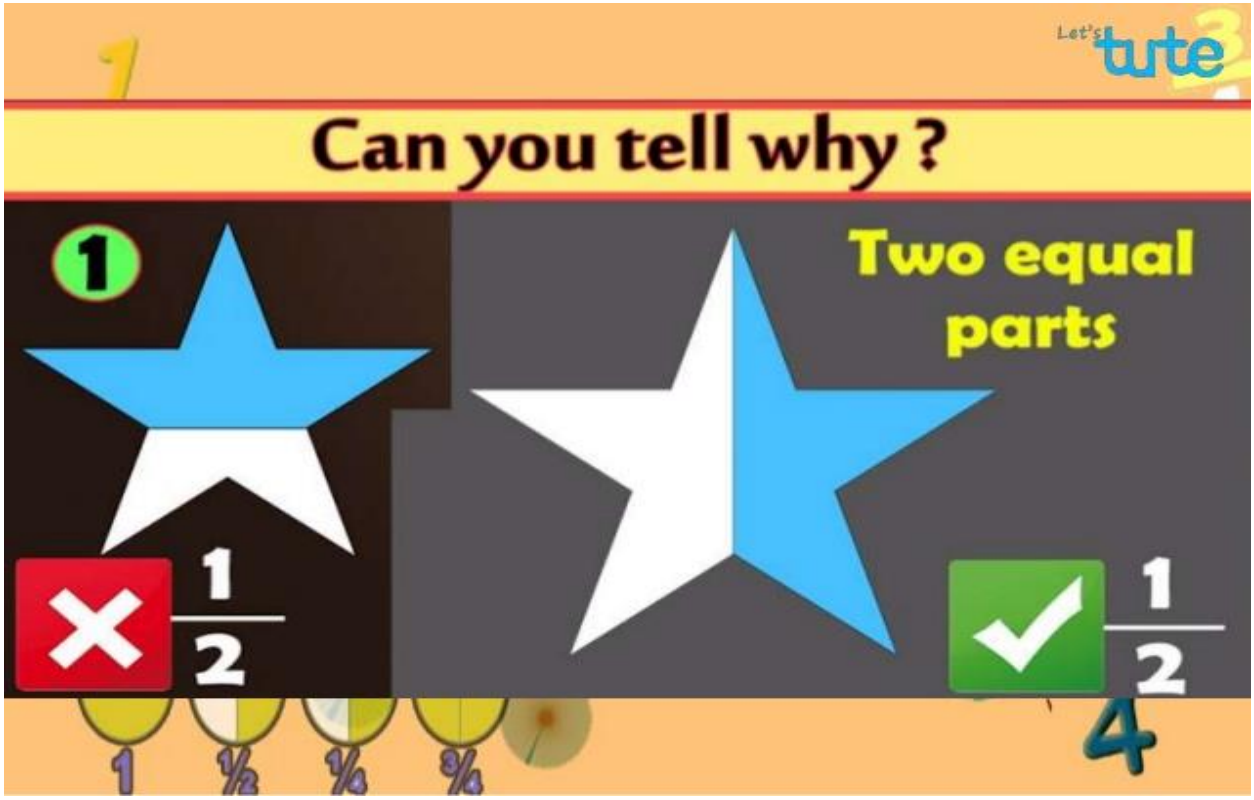

Let's tute
Fraction
a
b
cannot be zero
b = 0
Why cannot be zero
?
1
½
¼
¾
4

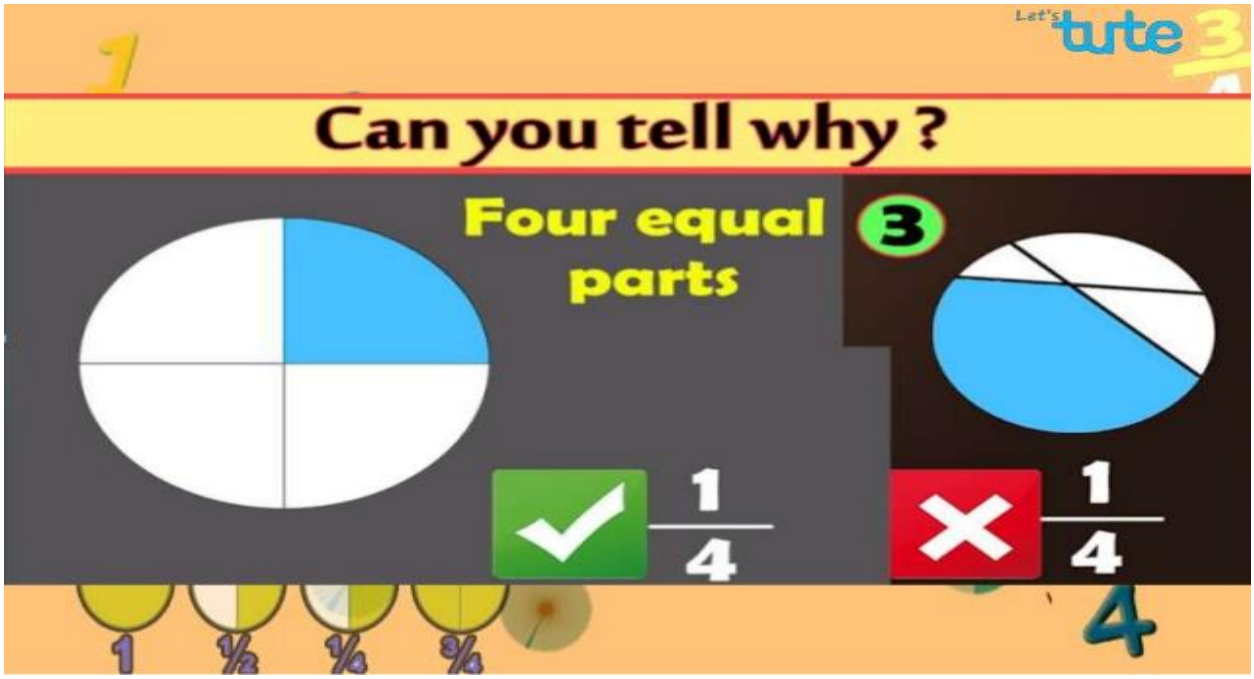

Let's tute
Fraction
a
b
cannot be zero
If b = 0, then the fraction will be not defined as we cannot divide anything by zero.
1
½
¼
¾
4


Golden Rule of Mathematics
Golden Rule
Cannot be divided into zero parts
a
b
Let's tute

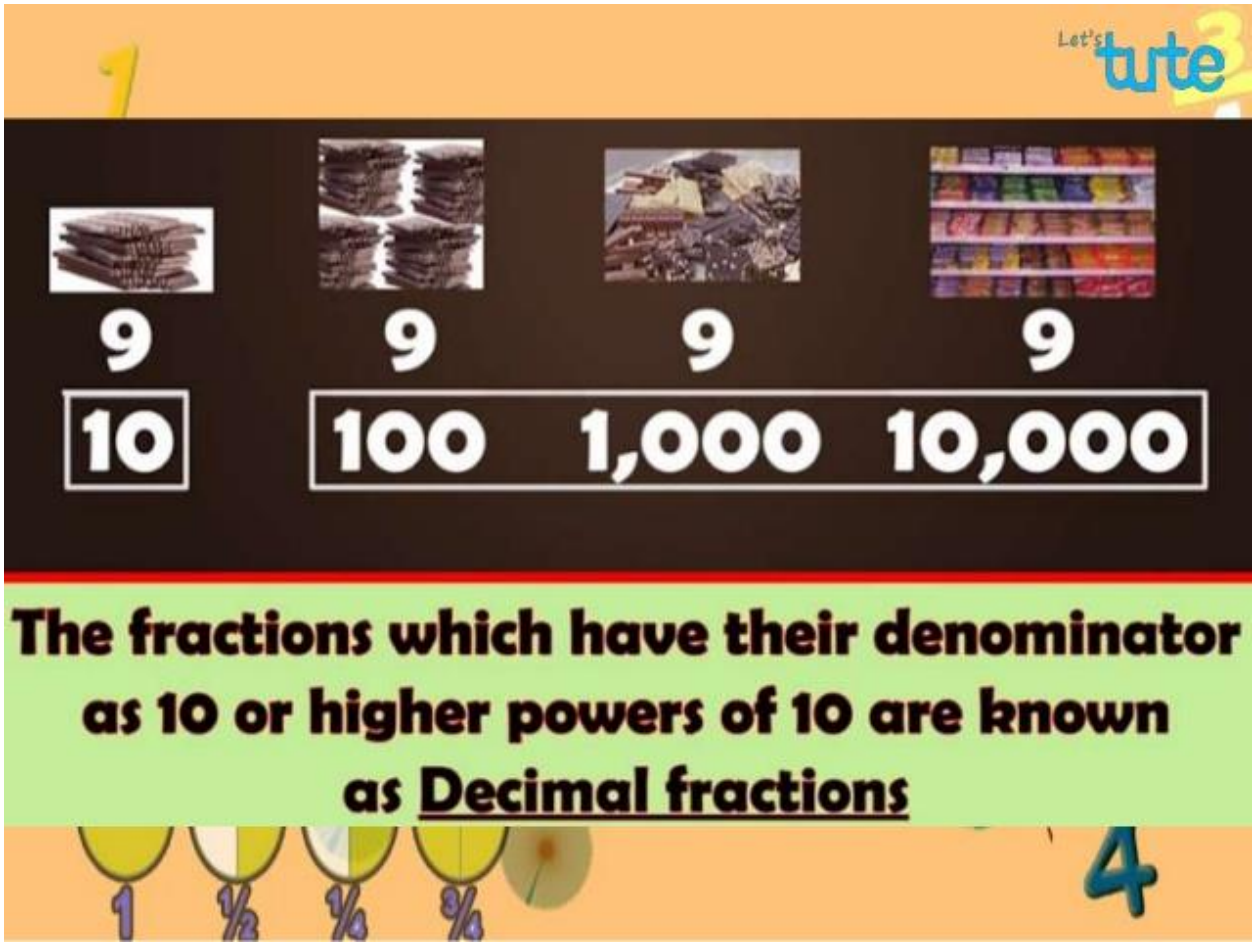

Let's tute
Does the shaded region correspond to the fractions displayed ?
1
2
3
1/2
2/3
1/4


Let's tute
Does the shaded region correspond to the fractions displayed ?
1
2
3
1/2
2/3
1/4
1
1/2
1/4
3/4
4


Let's tute
Can you tell why ?
1
Two equal parts
1/2
1/2
1
1/2
1/4
3/4
4



TYPES OF FRACTION:



Proper fractions are the fractions where the numerator is smaller than the denominator.

Improper fractions are the fractions where the numerator is bigger than the denominator.

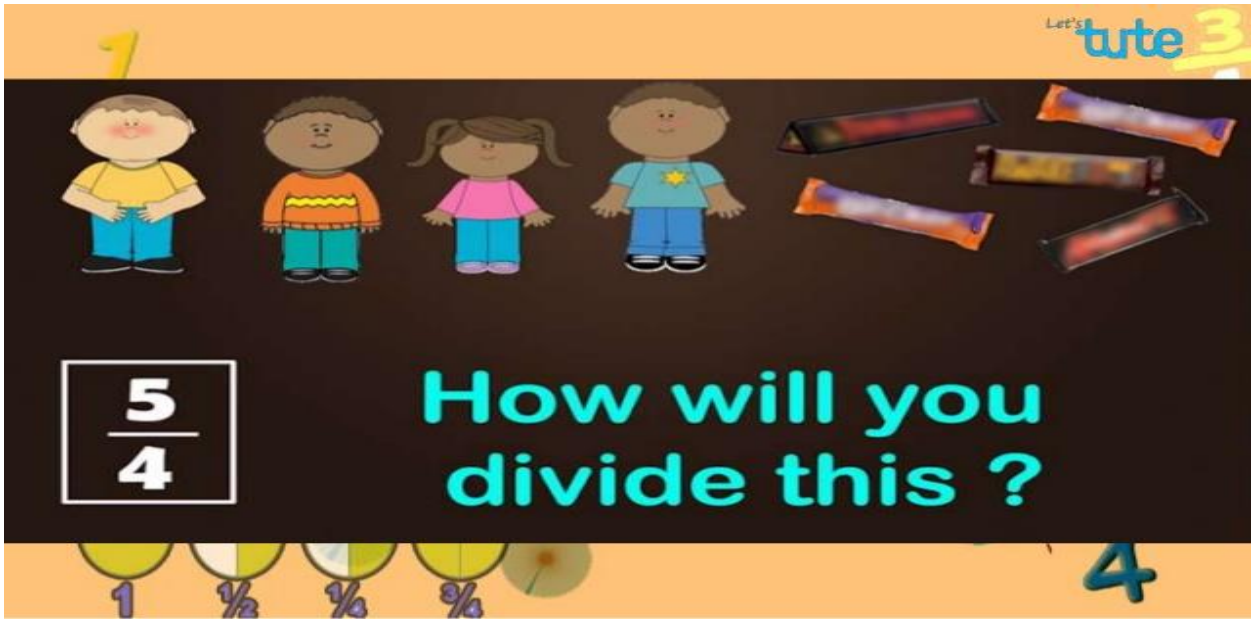
Improper Fractions

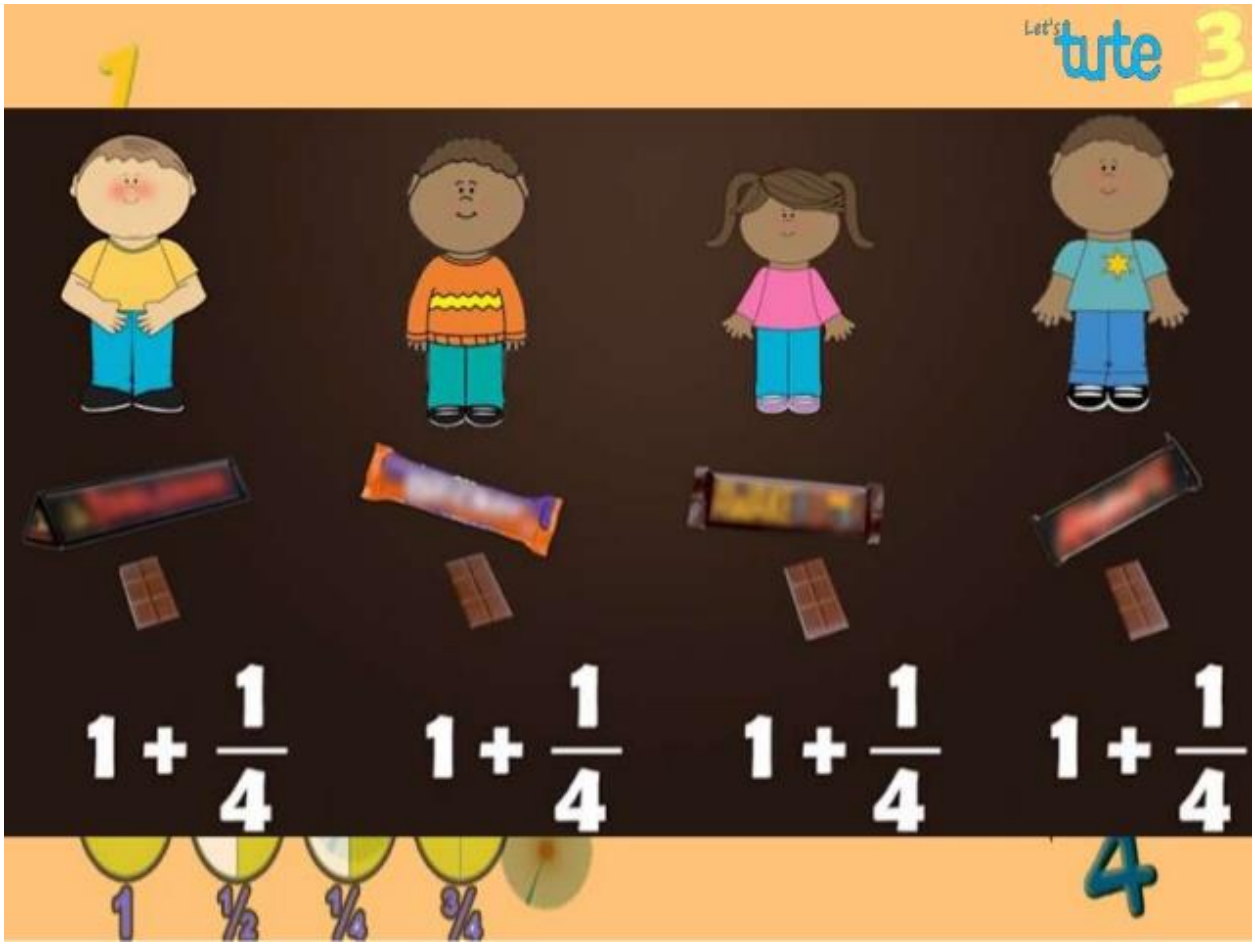
$\frac{10}{9}$ $\frac{6}{5}$ $\frac{100}{9}$ $\frac{25}{9}$ $\boxed{\frac{5}{4}}$

Let's tute

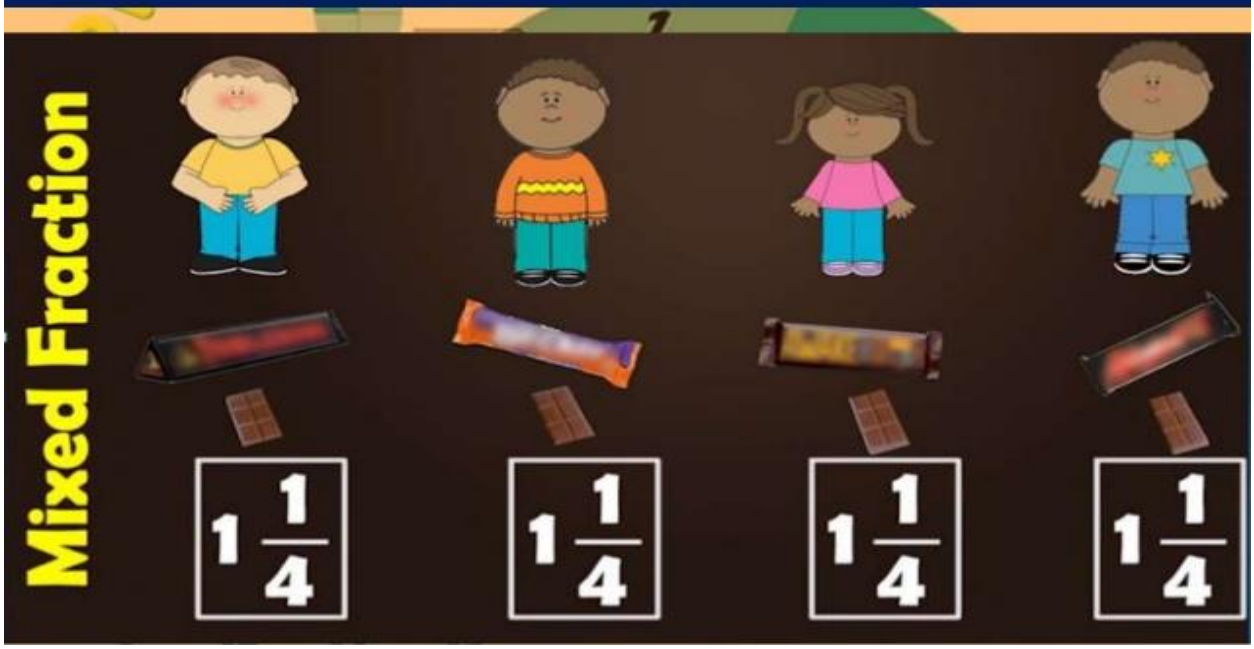
Let's tute

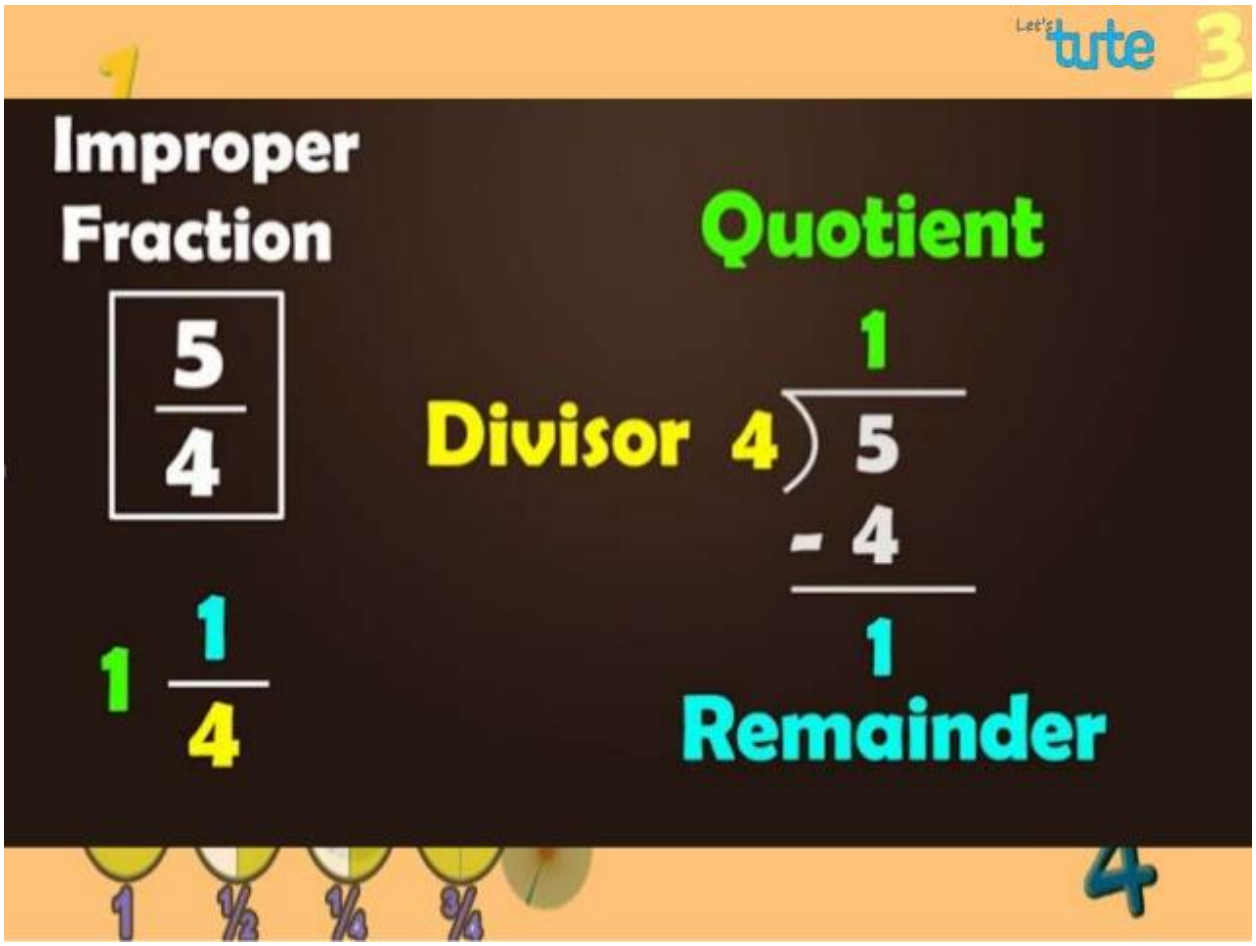
Proper fractions	Improper fractions
Whenever we perform a normal division on a proper fraction, the answer will always be **less than 1**	Whenever we perform a normal division on a improper fraction, the answer will always be **more than 1**
$\frac{1}{4} = 0.25$	$\frac{5}{4} = 1.25$

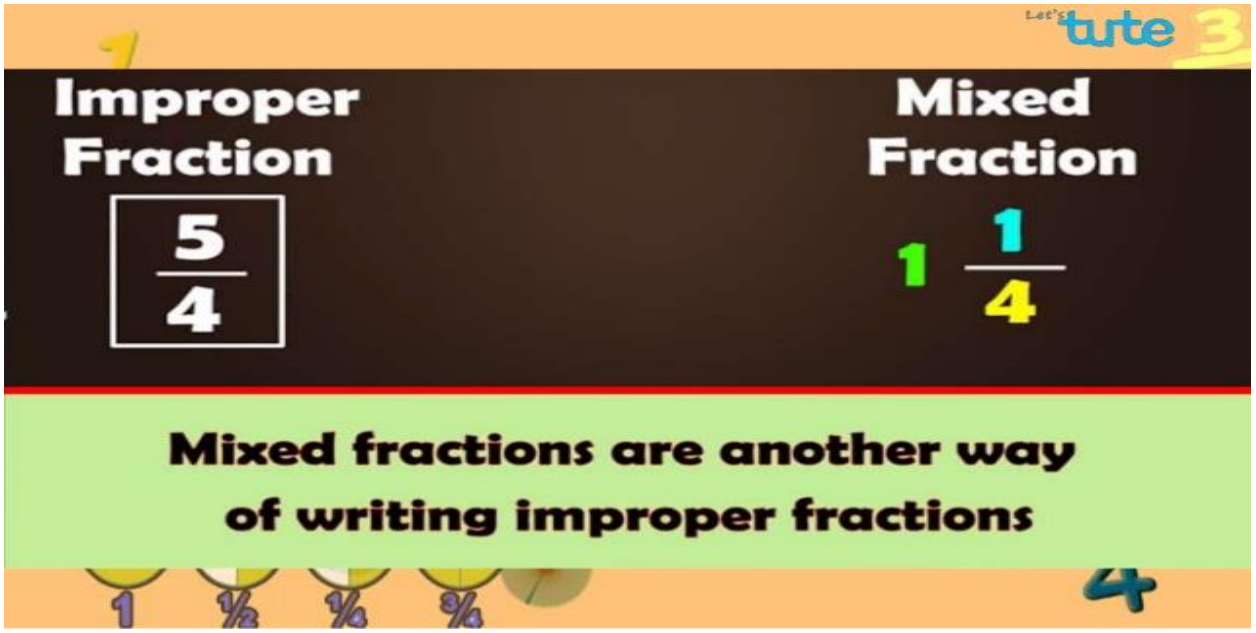

Let's tute
$\frac{5}{4}$
How will you divide this ?


Let's tute
$1+\frac{1}{4}$
$1+\frac{1}{4}$
$1+\frac{1}{4}$
$1+\frac{1}{4}$

Mixed fraction is simply an improper fraction written as the sum of a whole number and a proper fraction




Let's tute
Improper Fraction
5/4
1 1/4
Quotient
1
Divisor 4) 5
- 4
1
Remainder


Let's tute
Improper Fraction
5/4
Mixed Fraction
1 1/4
Mixed fractions are another way of writing improper fractions