

SESSION : 8
CLASS : IV
SUBJECT : MATHEMATICS
CHAPTER NUMBER : 11
CHAPTER NAME : FRACTIONS
**SUBTOPIC : INTRODUCTION OF FRACTIONS
AND WRITING FRACTIONS IN WORDS**

CHANGING YOUR TOMORROW

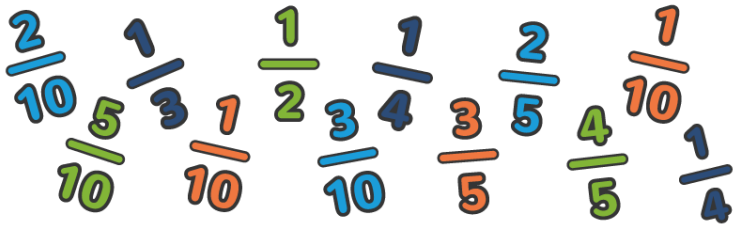
LEARNING OBJECTIVE

- Enable the students to understand the meaning of fractions and also knowing the concept of fractions.

INTRODUCTION OF FRACTION



A **fraction** represents a part of a whole or, more generally, any number of equal parts.



INTRODUCTION OF FRACTION

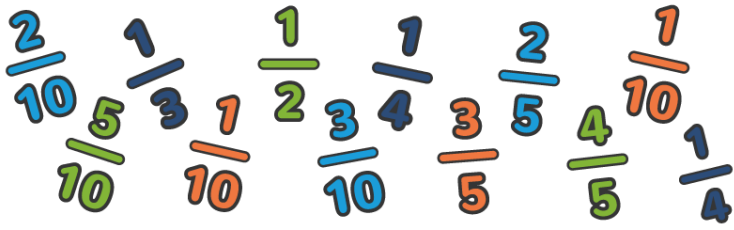


What is a fraction?

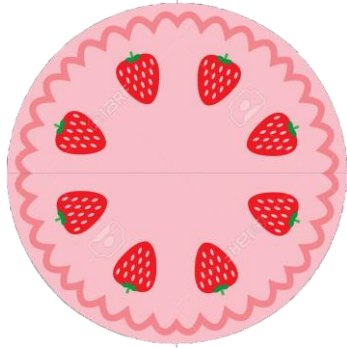
A whole that is divided into equal parts.

A cartoon boy with brown hair, wearing a green sweater, is thinking with his hand on his chin. To his right is a green box containing a pizza divided into 8 equal slices and two hands holding 4 equal pieces of candy. The text 'What is a fraction?' is at the top, and 'A whole that is divided into equal parts.' is below it. The word 'equal' is underlined.

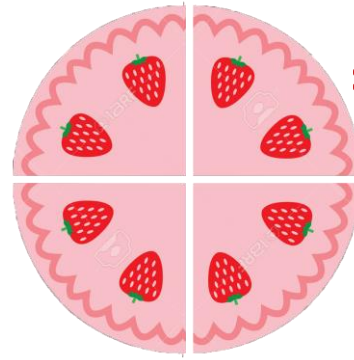
What is a fraction?



INTRODUCTION OF FRACTION



=



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



=

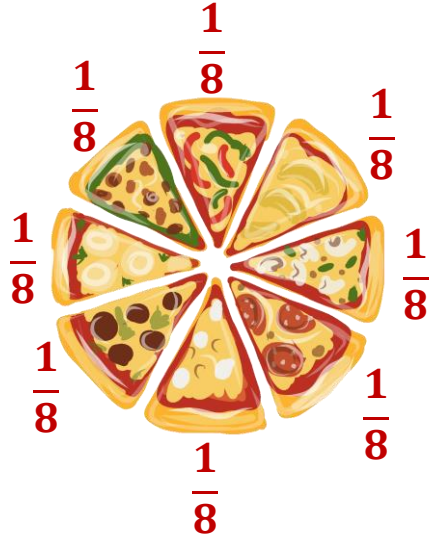


$$= \frac{1}{8}$$



$\frac{2}{10}$ $\frac{1}{3}$ $\frac{1}{2}$ $\frac{1}{4}$ $\frac{2}{5}$ $\frac{1}{10}$
 $\frac{5}{10}$ $\frac{1}{10}$ $\frac{3}{10}$ $\frac{3}{5}$ $\frac{4}{5}$ $\frac{1}{4}$

INTRODUCTION OF FRACTION



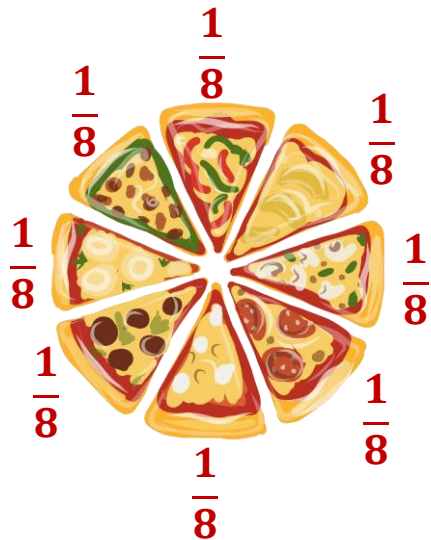
When the pizza is divided into **8** equal parts, then each part is known as **one-eight** of the whole pizza and is represented as $\frac{1}{8}$ i.e. one pizza divided into **8** equal parts.

Here, $\frac{1}{8}$ is known as a **fraction** and it is read as one by eight.

A fraction has two parts – **Denominator** and **Numerator**.



INTRODUCTION OF FRACTION



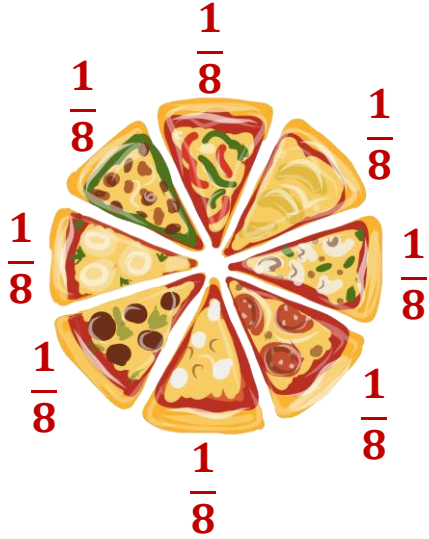
The number of equal parts one whole has been divided into, is called the **denominator** of the fraction. The number of parts of the whole that are under consideration, is called the **numerator** of the fraction.

In the above, **1** whole pizza was divided into **8** equal parts. So, **8** will be the **denominator** and **1** will be the **numerator** since we are considering the portion of the pizza.

While writing a fraction, the **numerator** and the **denominator** are separated by a **horizontal line**.



INTRODUCTION OF FRACTION



Numerator is written **above** the line while the **denominator** is written **below** the line.

The fraction for the given example will be

① Numerator
 $\frac{1}{8}$
⑧ Denominator



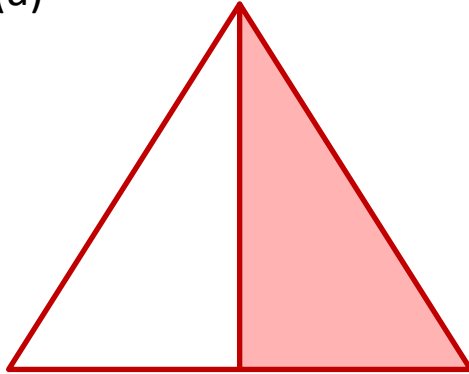
INTRODUCTION OF FRACTION

Example - 1

Write the fraction as represented by the figures given below.

Solution:

(a)



1 out of 2 parts is under consideration.

So, the fraction is $\frac{1}{2}$.



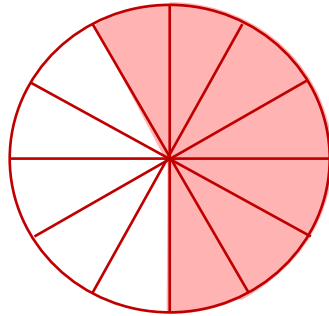
INTRODUCTION OF FRACTION

Example - 1

Write the fraction as represented by the figures given below.

Solution:

(b)



7 out of 12 parts is under consideration.

So, the fraction is $\frac{7}{12}$.

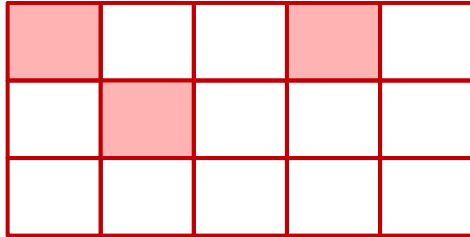


INTRODUCTION OF FRACTION

Example - 1

Write the fraction as represented by the figures given below.

(c)



Solution:

3 out of 15 parts is under consideration.

So, the fraction is $\frac{3}{15}$.

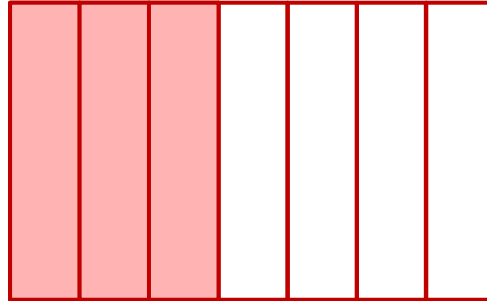


INTRODUCTION OF FRACTION

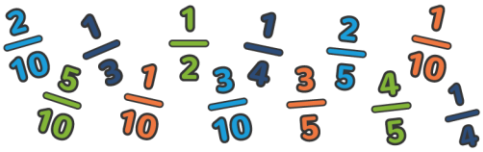
Example - 2

Represent the fractions given below by shading the respective figures.

(a) $\frac{3}{7}$



Solution

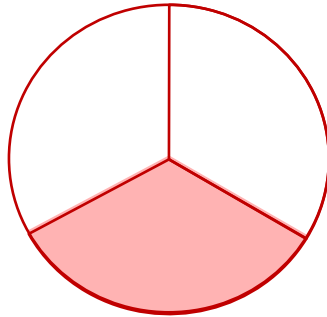


INTRODUCTION OF FRACTION

Example - 2

Represent the fractions given below by shading the respective figures.

(b) $\frac{1}{3}$



Solution

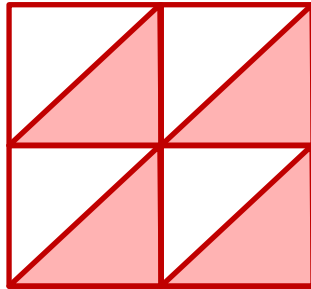


INTRODUCTION OF FRACTION

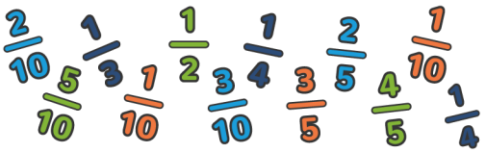
Example - 2

Represent the fractions given below by shading the respective figures.

(c) $\frac{4}{8}$

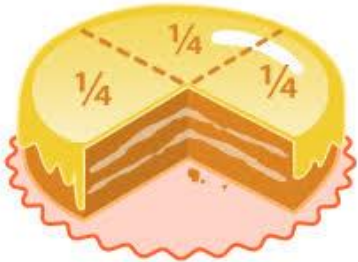


Solution



WRITING FRACTIONS IN WORDS

The **numerator** of a fraction is simply written in words while the **denominator** is written in the ordinal, plural form except in cases where the **denominator** is 2. the **numerator** and **denominator** are separated by a **hyphen (-)**.

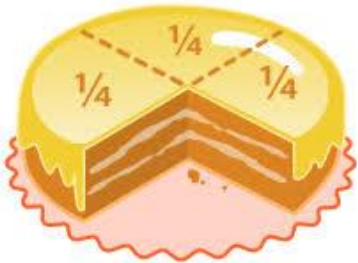


WRITING FRACTIONS IN WORDS

Example - 1

$$\frac{7}{8}$$

Will be written as **seven-eighths**.



WRITING FRACTIONS IN WORDS

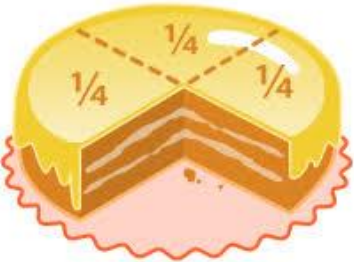
Example - 2

$$\frac{1}{2}$$

For fractions having 2 as their denominators, the word half is used after the hyphen.

Will be written as **one-half** and not one-second.

Note: for fraction with denominator 4, '**quarters**' can also be used after the hyphen.

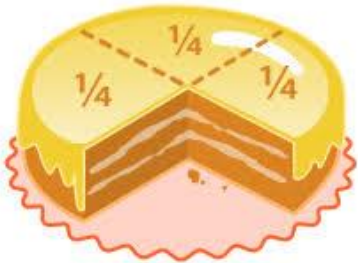


WRITING FRACTIONS IN WORDS

Example - 3

$$\frac{3}{4}$$

Will be written as **three-quarters** or **three-fourths**.



WRITING FRACTIONS IN WORDS

Example - 4

Write the following fractions in words.

(a) $\frac{3}{4}$

(b) $\frac{5}{13}$

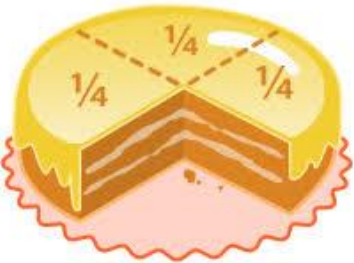
(c) $\frac{7}{12}$

Answer

(a) Three-fourths

(b) Five-thirteenths

(c) seven-twelfths



LEARNING OUTCOME:

Students are able to understand the meaning and concept of fractions.

THANKING YOU
ODM EDUCATIONAL GROUP