

WELCOME

SUBJECT : MATHEMATICS

TOPIC : PARTS AND WHOLES

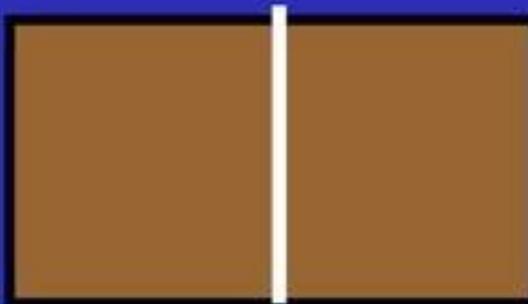
CLASS : V



# Fraction - Part of a whole



1



1/2

## Chocolate Bar - The Whole Piece



$\frac{1}{2}$



$\frac{1}{2}$

Shared between two children

Each one gets a half of the  
chocolate.

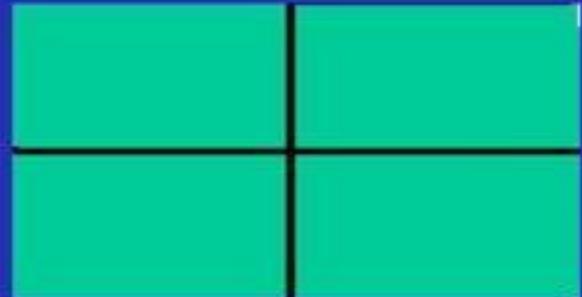
**1/2**

**1 is the numerator**

**2 is the denominator**

**Numerator tells us that out of two equal parts of the whole, 1 is taken.**

**Denominator tells us that the whole is divided into two equal parts.**



**When divided between  
four children**

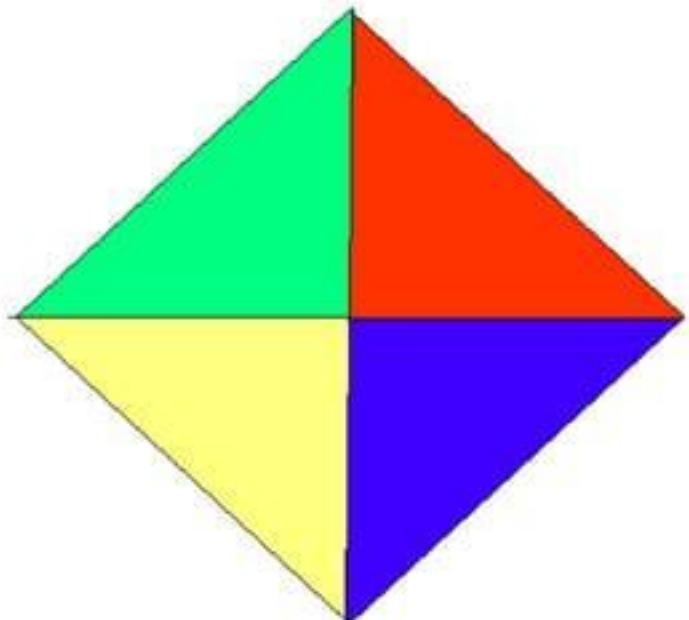
**1/4**

**1/4**

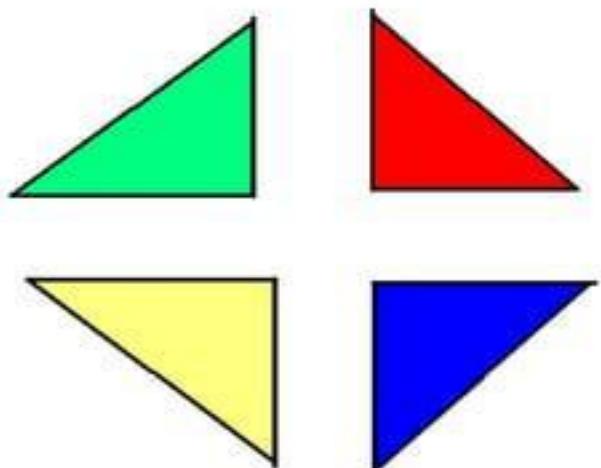
**1/4**

**1/4**

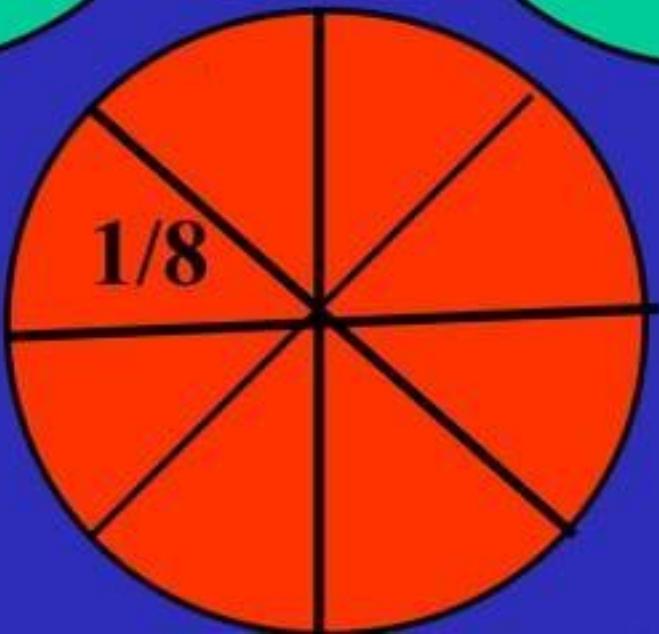
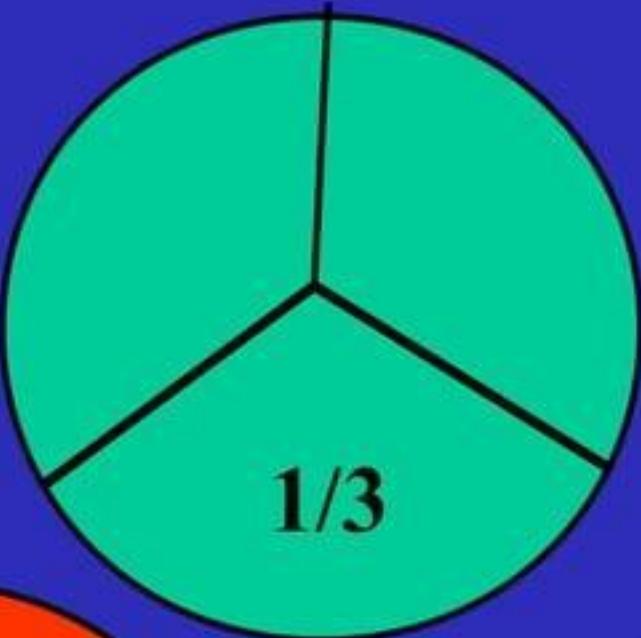
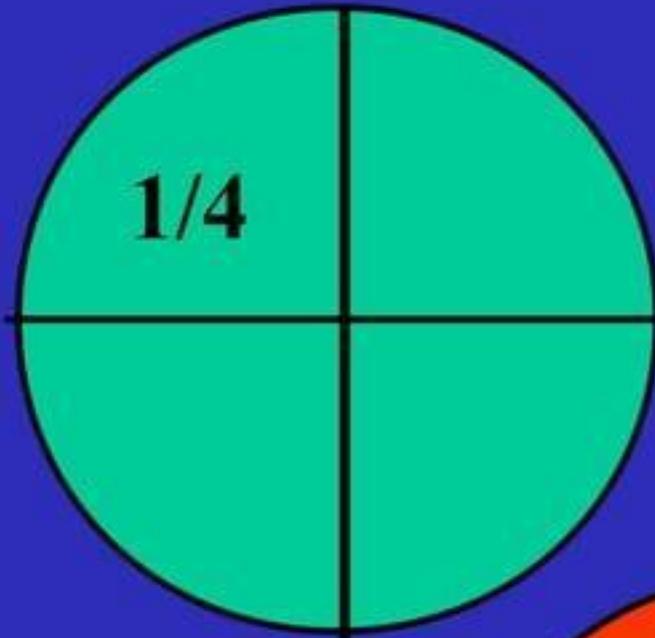
**Each child gets a quarter  
or  $\frac{1}{4}$  th of the chocolate.**

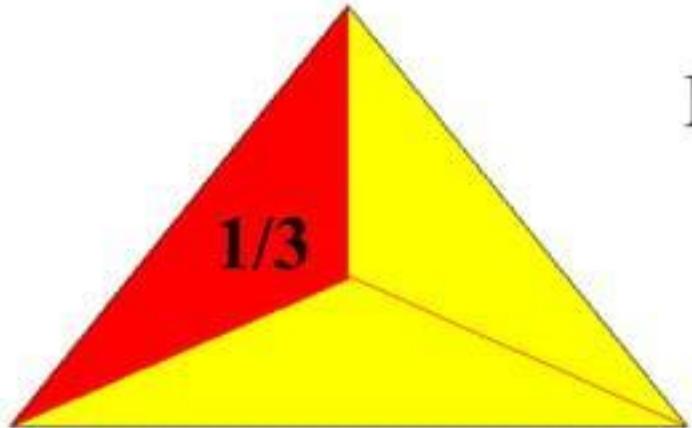


•The whole is divided into four equal parts.

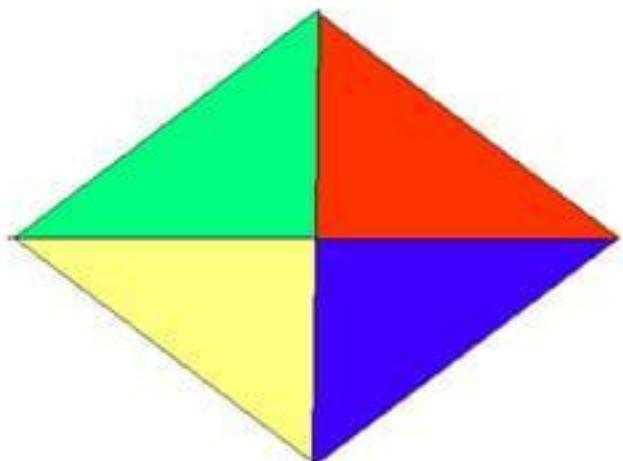


•For one part out of four we say one - fourth and we write  $\frac{1}{4}$ .





For one part out of three  
we say **one third** and we  
write  $1/3$ .



$1/4$

The whole is divided  
into four equal parts.  
For one part out of  
four we say **one fourth**  
and we write  $\frac{1}{4}$ .

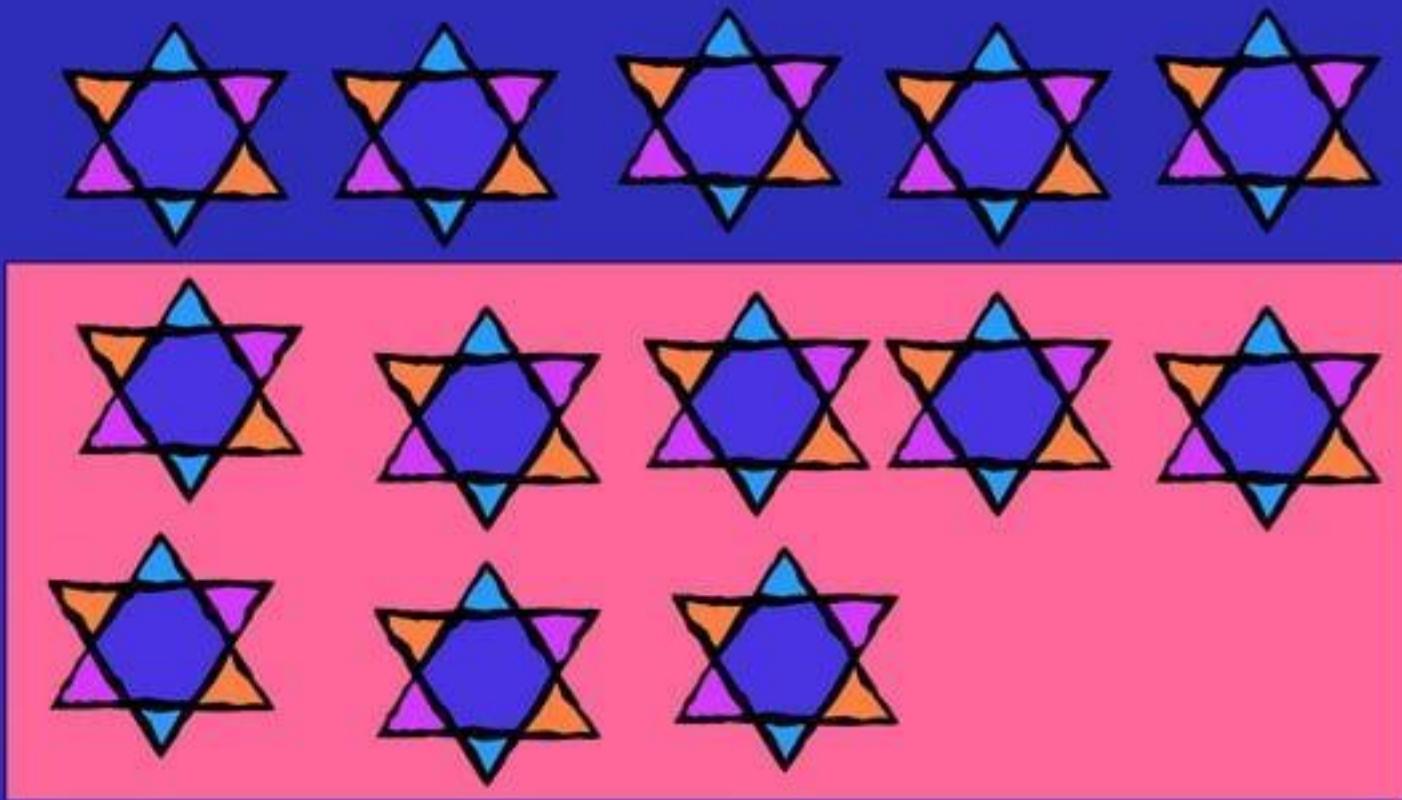
# Fraction as a part of a collection.



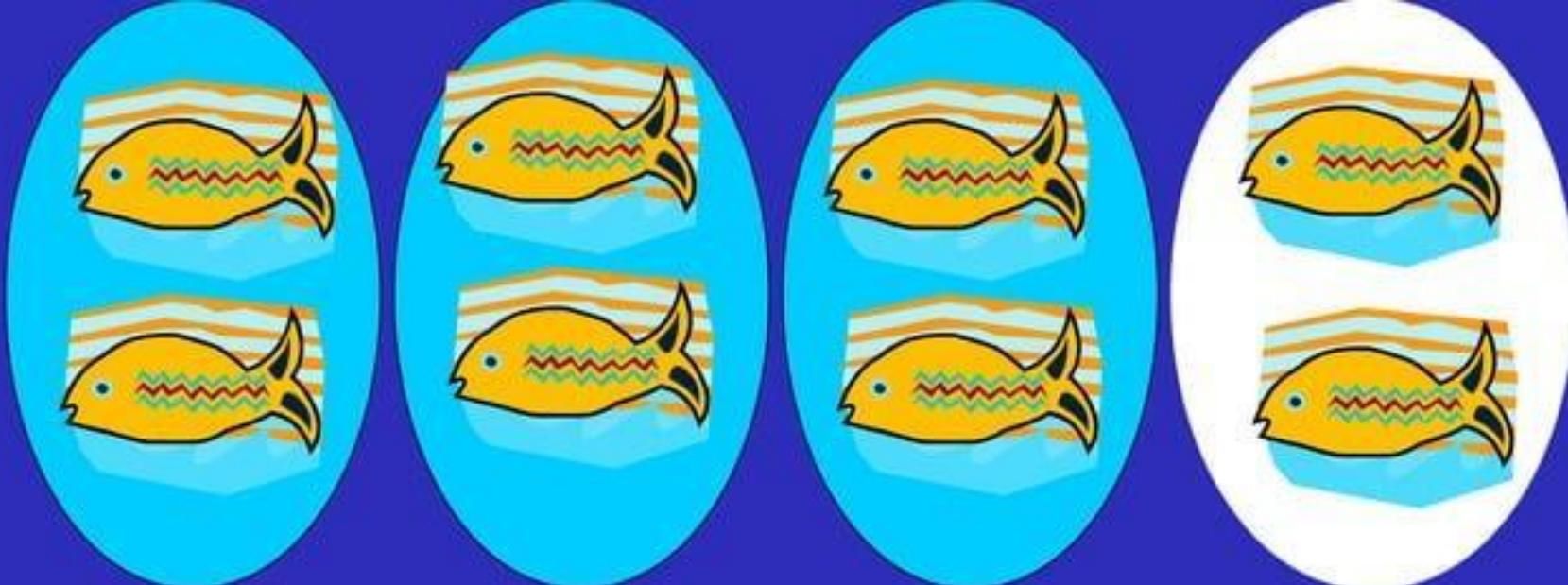
Three out of seven- $3/7$



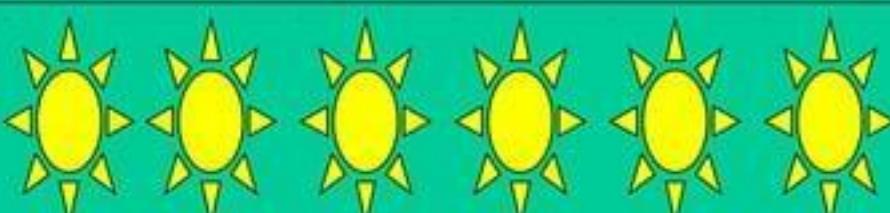
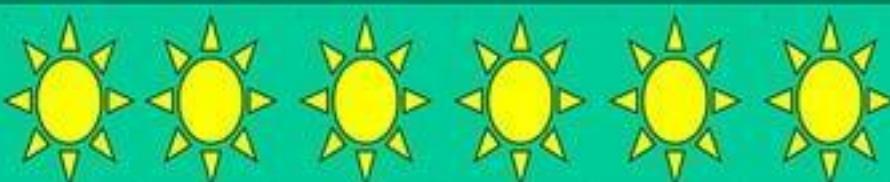
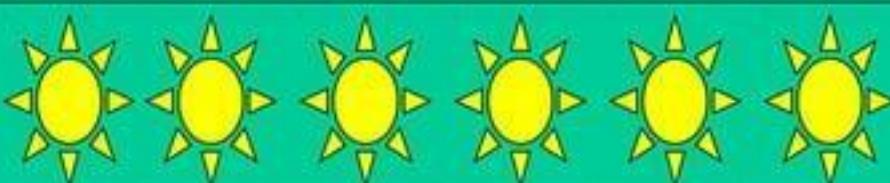
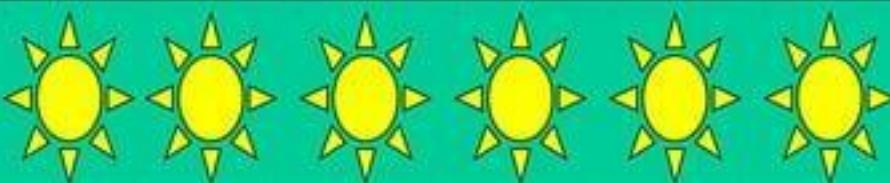
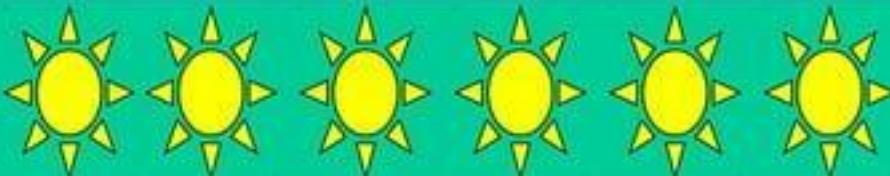
Three out of five ----- 3/5



**Eight out of thirteen- We say eight  
thirteenths and we write 8/13**



Three out of four or  
Three - fourths -  $\frac{3}{4}$



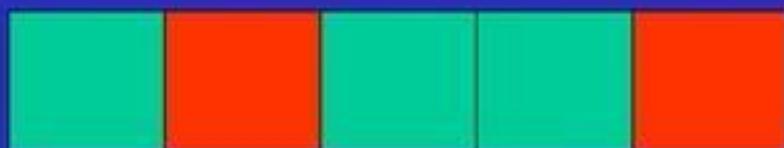
There are  
thirty  
flowers.

- $\frac{3}{5}$  of 30 is 18
- $\frac{2}{6}$  of 30 is 10

# TYPES OF FRACTIONS

- LIKE AND UNLIKE FRACTIONS
- PROPER AND IMPROPER FRACTIONS

# Like And Unlike Fractions



$2/5$



$1/5$

Fractions with the same denominators are called

**Like Fractions.**

## LIKE FRACTIONS

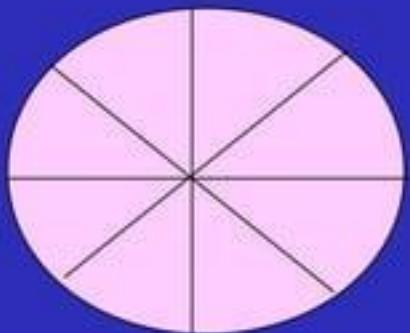
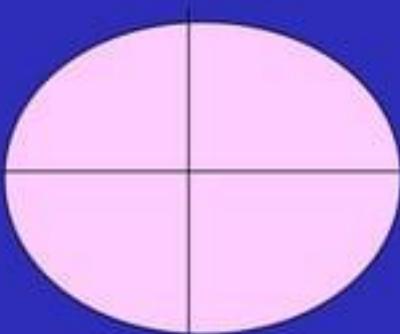
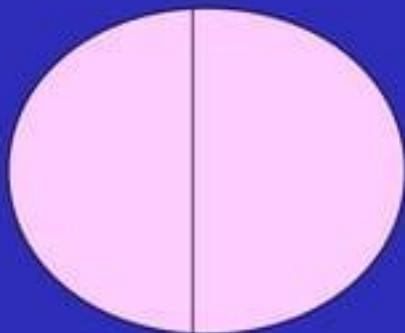
**1/5 , 2/5 , 3/5 , 4/5**

are Like Fractions.

Denominator is the same in all  
the fractions given above.

That is 5.

# Unlike Fractions



$1/2$

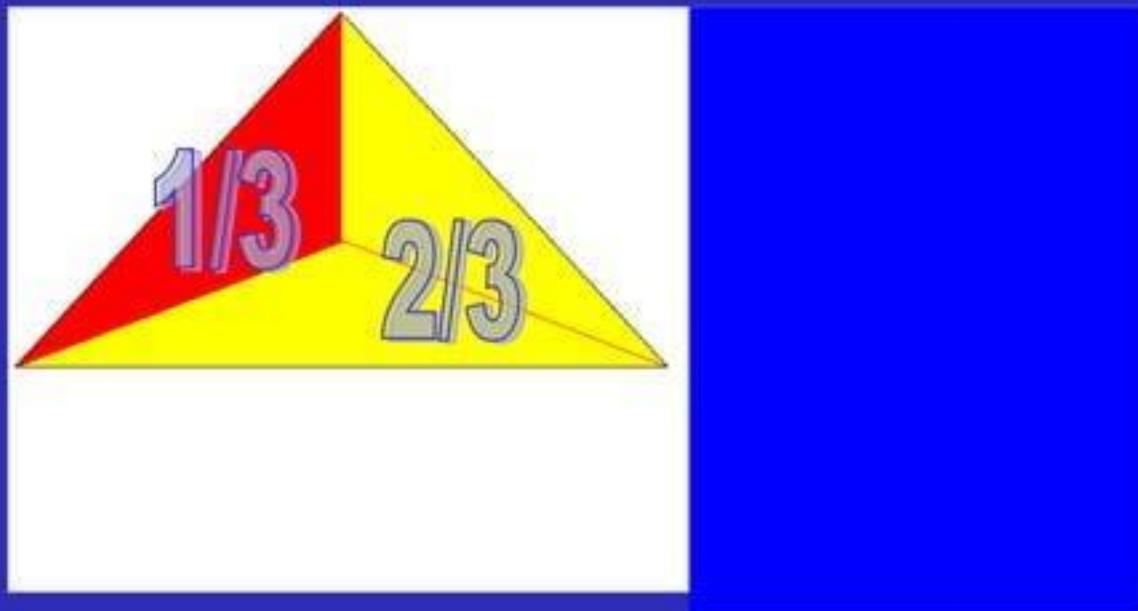
$1/4$

$3/8$

Fractions with different denominators  
are called Unlike Fraction.

# PROPER AND IMPROPER

# FRACTIONS

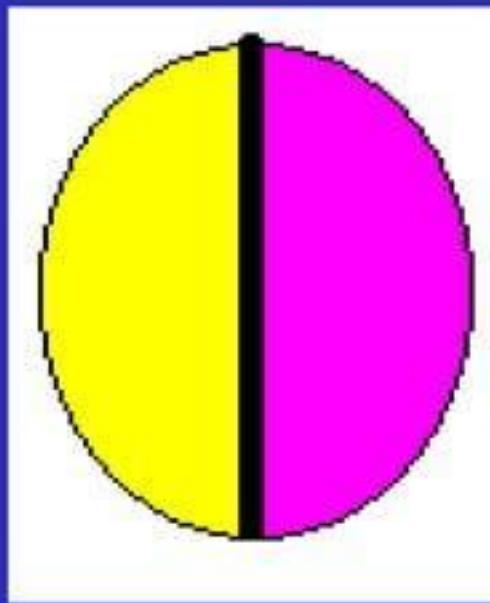


$1/3, 2/3$  are Proper Fractions.

The fractions with numerator less than the denominators are called **PROPER FRACTIONS**.

Eg:  $2/5, 3/4, 5/7, 7/9$  etc.

# IMPROPER FRACTIONS

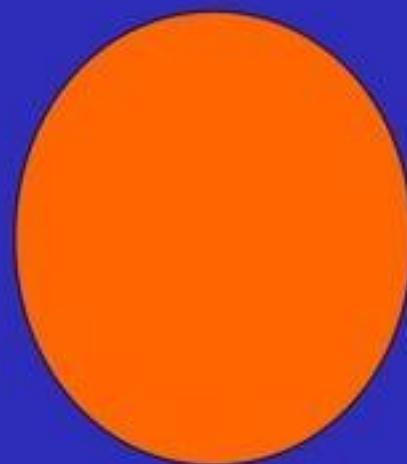
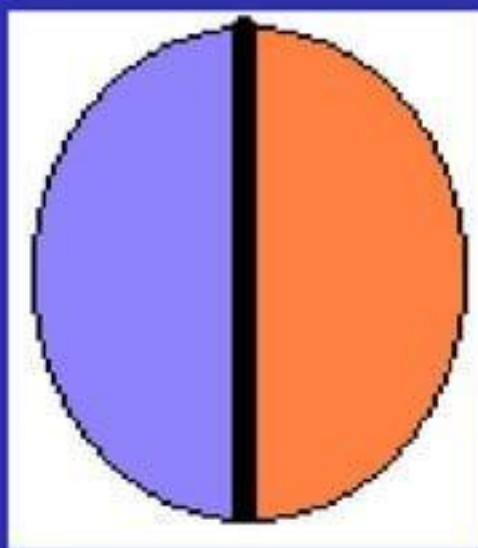


**1 and  $\frac{1}{2}$  circle is yellow,  $\frac{1}{2}$  and 1 circle is pink.**

Each part represents an improper fraction –  $3/2 = 1 + 1/2$

**A Fraction with numerator greater than or equal to the denominator is called an IMPROPER FRACTION**

# MIXED FRACTION



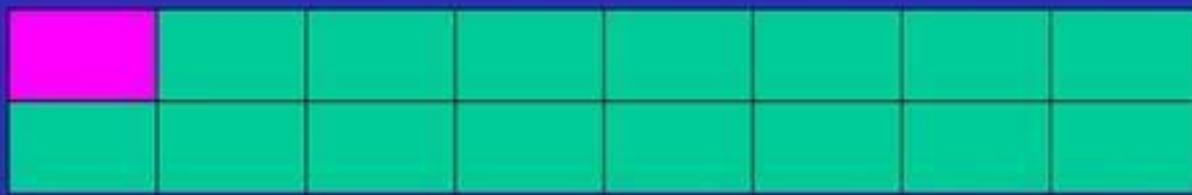
$1 + \frac{1}{2}$  circle is in orange ,so  $1 + \frac{1}{2} = \frac{3}{2} = 1 \frac{1}{2}$

When an improper fraction is written as a combination of a whole number and a proper fraction,it is called a

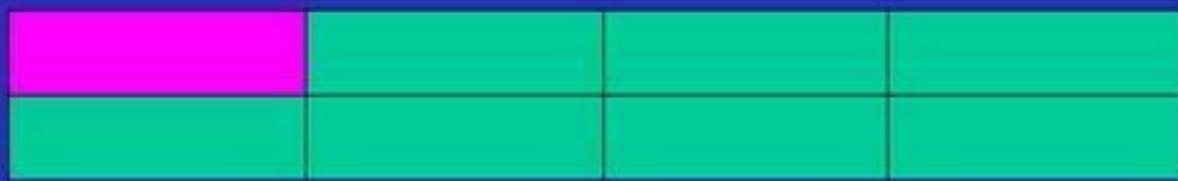
**MIXED FRACTION OR A MIXED NUMBER**

Ex:- $1\frac{1}{3}, 2\frac{3}{4}, 1\frac{7}{8}, 2\frac{4}{7}$  are all mixed numbers

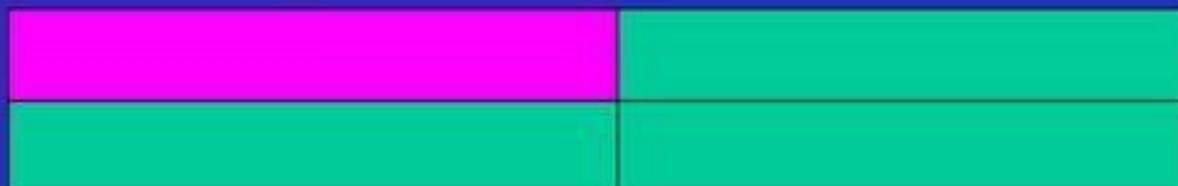
# UNIT FRACTIONS



$1/16$



$1/8$



$1/4$

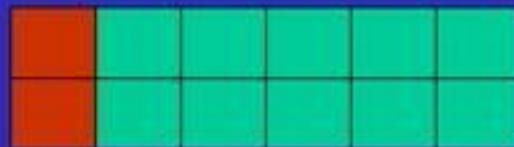


$1/2$

A proper fraction with numerator 1 is called a unit fraction.  
ex:- $1/2, 1/3, 1/4, 1/5, 1/6$  are all UNIT FRACTIONS

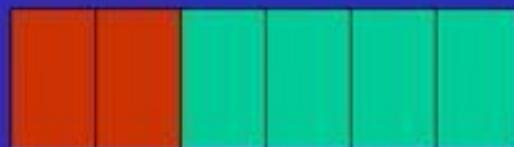
## SAY FRACTION FOR THE SHADED PORTION(RED)

(a)



2/12

(b)



2/6

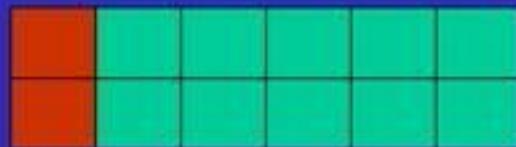
(c)



2/3

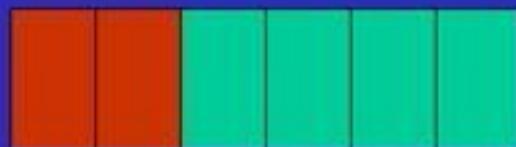
## SAY FRACTION FOR THE SHADED PORTION(GREEN)

(a)



$10/12$

(b)

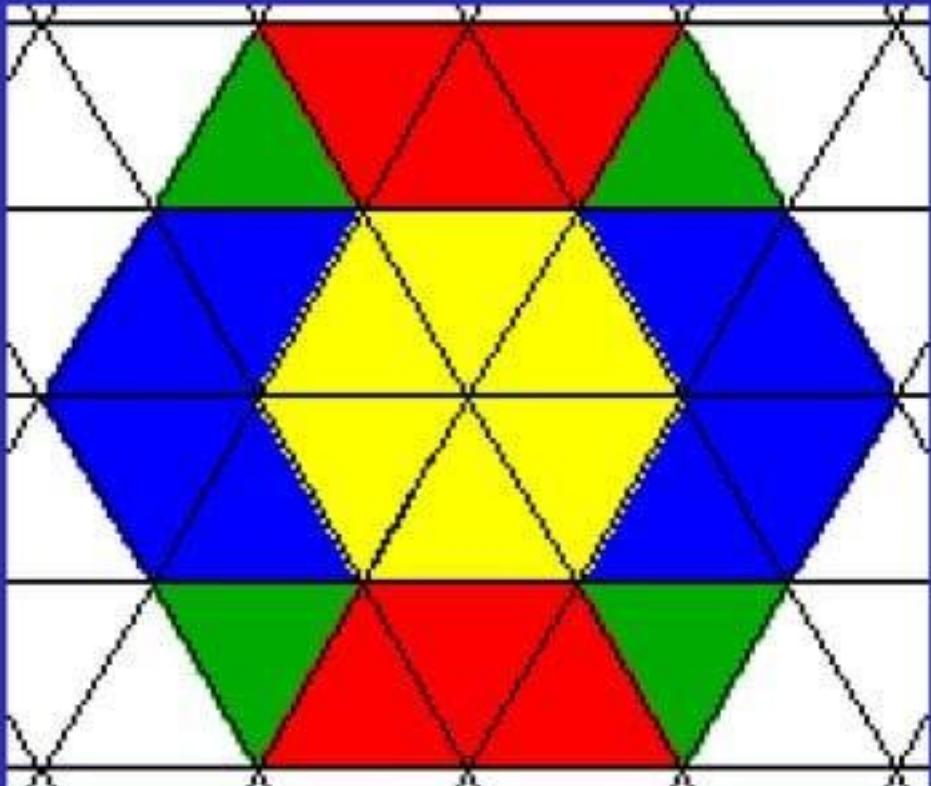


$4/6$

(c)



$1/3$



• What fraction of the design is blue?

8/28

• What fraction of the design is yellow?

6/28

• What fraction of the design is red?

6/28

• What fraction of the design is green?

4/28

## Name the type of fractions.

- Fractions with Numerators > or = Denominators
- Improper Fractions
- Fractions with the same denominators
- Like fractions
- Fractions with the numerator 1
- Unit Fractions
- Fractions with different denominators
- Unlike Fractions

## **GROUP -1**

Q. PREPARE AMANS TIME TABLE USING DIFFERENT COLOURS

- SLEEPING  $1/3^{\text{RD}}$  OF THE DAY
- STUDYING  $1/4^{\text{TH}}$  OF THE DAY
- PLAYING  $1/8^{\text{TH}}$  OF THE DAY

## **GROUP -2**

Q. COLOUR THE GIVEN GRIDS OF 16 SQUARES IN TWO DIFFERENT WAYS BY MAKING PATTERNS WITH  $8/16$  BLUE AND  $8/16$  YELLOW

## **GROUP -3**

Q. DIVIDE EACH OF THE TRIANGLE IN TWO DIFFERENT WAYS. COLOUR  $1/3^{\text{RD}}$  OF EACH RECTANGLE.

## **GROUP - 4**

Q. DIVIDE EACH OF THE TWO RECTANGLE INTO SIX EQUAL PARTS IN TWO DIFRENT WAYS AND COLOUR  $1/6^{\text{TH}}$  OF EACH OF THE RECTANGLE.

**THANK YOU**