

JANUARY

*Makugihon*

FEBRUARY

*Mahigugmaon*

MARCH

*Matinabangon*

APRIL

*Matinahuron*

MAY

*Mahapsay og Malimpyog*

JUNE

*Maabtik og Masunod sa  
Ihsaklong Oras*

JULY

*Maantigo og Maabilidad*

AUGUST

*Maginhuhunagon  
para sa Uban*

SEPTEMBER

*Madaginoton*

OCTOBER

*Matinud-anon*

NOVEMBER

*Masaligan*

DECEMBER

*Maalampon*



Republic of the Philippines

Department of Education

Regional Office IX, Zamboanga Peninsula



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# MATHEMATICS

## 2<sup>ND</sup> QUARTER – Module 4:

### FRACTIONS



Name of Learner: \_\_\_\_\_

Grade & Section: \_\_\_\_\_

Name of School: \_\_\_\_\_

**Grade 4**  
**Alternative Delivery Mode**  
**Quarter 2 – Module 4 : FRACTIONS**

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## What I Need to Know (Alamin)

In this module, you will be able to enjoy working with fractions specially on changing them. If you change an improper fractions to mixed number ( **M4NS-Ile-8-**), divide the numerator by its denominator to represent each fraction, you will see how to change improper fractions to mixed number by using regions or figures that we will be using to represent or change fraction.

You will be able to enjoy working with numbers especially in Changing Fractions to Lowest Term (**M4NS-Ile-81**). If you wish to change the fraction to lowest term, you will learn how to do it because so many activities/examples given.

**Study the illustration of the problem.**



Beng will serve  $\frac{9}{4}$ , bibingka to her friends.

How many whole bibingka and fractional part of a bibingka does she have?

Notice that there are 2 whole bibingka and  $\frac{1}{4}$  of a bibingka.

You need to change  $\frac{9}{4}$  to a mixed number.

Study the solution below:

Step 1:

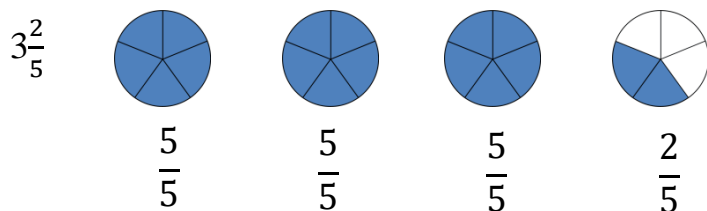
$$\frac{9}{4} = 9 \div 4 = 2 \frac{1}{4}$$

Express the remainder as a fraction.

How do you change a mixed number to an improper fraction?

Look at the example:

Step 2:



There are  $\frac{17}{5}$  in all.

By computation.

$$3 \frac{2}{5} = \frac{(5 \times 3) + 2}{5} = \frac{15 + 2}{5} = \frac{17}{5}$$

## Lesson

# Changing Improper Fractions to Mixed Number and Vice Versa Changing Fractions to Lowest Terms



### What's In (Balikan)

A. Change improper fractions as mixed numbers and mixed numbers as improper fractions.

1.  $\frac{11}{5}$

2.  $\frac{30}{4}$

3. Change  $\frac{9}{6}$  to a mixed number.

4. Rename  $2\frac{5}{7}$  as an improper fraction.

5. Change  $3\frac{6}{5}$  to an improper fraction



### What's New (Tuklasin)

Change improper fractions as mixed numbers and mixed numbers to improper fractions.

1. )  $2\frac{20}{7}$

2.)  $\frac{13}{4}$

Let us read the story problem. Then answer the questions below.

Ford cut a whole pizza into 8 equal parts. He gave 2 slices to each of his brothers and ate the rest. What part did each one get?

Questions:

- 1.) To whom did Ford give the 2 slices of pizza?
- 2.) How did he divide the pizza?
- 3.) What do you call a part of it?



## What is It (Suriin)

So that you will get to know more about changing fractions to a mixed number and vice versa, answer the following questions. Use the examples given as your basis in answering.

Change the following fractions to improper fraction or mixed number.

1.  $\frac{13}{2}$

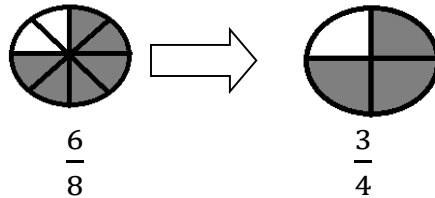
2.  $\frac{13}{12}$

3.  $\frac{22}{7}$

B. Let's explore ways on how to change  $\frac{6}{8}$  to lowest terms.

Expected answer:

A. By drawing a model



C. By dividing the numerator and denominator by their GCF.

Factors of 6:  2    3    6

Factors of 8:  2    4    8

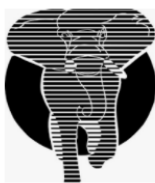
GCF - 2

So:  $\frac{6}{8} \div \frac{2}{2} = \frac{3}{4}$

By using prime factorization and cancelling common prime factors.

$$6 \neq 2 \times 3 \underline{\quad} = 3$$

$$8 \neq 2 \times 2 \times 2 \quad 4$$



## What's More (Pagyamanin)

Direction: Fill in the box with the correct number.

1.  $\frac{8}{3} = \frac{2}{3}$

2.  $8 \frac{1}{3}$

=

Here is another example:

$\frac{1}{2}$				$\frac{1}{2}$			
$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$	
$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$

How many fourths are there in  $\frac{1}{2}$ ?

*There are two one-fourths in  $\frac{1}{2}$ .*

Are  $\frac{2}{4}$  and  $\frac{1}{2}$  equal? Yes

How many eights are there in  $\frac{1}{2}$ ?

*There are 4 one-eighths in  $\frac{1}{2}$ .*

Are  $\frac{4}{8}$  and  $\frac{1}{2}$  equal? Yes.

We can say that  $\frac{1}{2}$  is the lowest term of  $\frac{4}{8}$ .

Because  $\frac{4 \div 4}{8 \div 4} = \frac{1}{2}$ , where 4 is the GCF.

$$\frac{4 \div 4}{8 \div 4} = \frac{1}{2}$$

We can also say that  $\frac{1}{2}$  is the lowest term of  $\frac{2}{4}$

Because  $\frac{2 \div 2}{4 \div 2} = \frac{1}{2}$  where 2 is the GC

$$\frac{2 \div 2}{4 \div 2} = \frac{1}{2}$$

There are two one-fourths in  $\frac{1}{2}$ , because two one-fourths equal to  $\frac{1}{2}$ , we can write this as  $\frac{2}{4}$ .

4 2

By the same reason, we also see that  $\frac{4}{8} = \frac{1}{2}$  and  $\frac{4}{8} = \frac{1}{2}$ .

### What I Can Do (Isagawa)

**A.** Write mixed number and improper fraction on your notebook.

1.)  $5 \frac{5}{4} =$

2.)  $\frac{6}{5} =$

**B.** Fill in the  with the correct number to change each given fraction to its lowest term.

3.)  $\frac{6}{12} = \frac{\square}{2}$

4.)  $\frac{9}{24} = \frac{3}{\square}$

5.)  $\frac{7}{21} = \frac{1}{\square}$



## Post Assessment

Direction: Choose the best answer and write your answer on your notebook.

1.) Change  $\frac{35}{10}$  to a mixed number.

A.  $3\frac{5}{10}$  or  $\frac{1}{2}$  B.  $2\frac{5}{10}$  or  $\frac{1}{2}$  C.  $3\frac{2}{10}$  or  $\frac{1}{5}$  D.  $2\frac{2}{10}$  or  $\frac{1}{5}$

2.) Rename  $10\frac{2}{7}$  as an improper fraction.

A.  $\frac{70}{7}$  B.  $\frac{17}{2}$  C.  $\frac{72}{2}$  D.  $\frac{72}{7}$

3.) Change  $2\frac{3}{6}$  to an improper fraction.

A.  $\frac{12}{6}$  B.  $\frac{15}{6}$  C.  $\frac{15}{5}$  D.  $\frac{8}{6}$

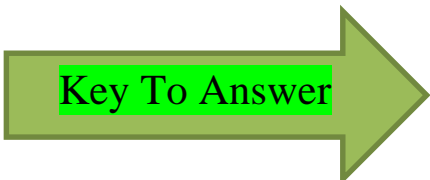
**B. Choose the lowest term of the given fraction in each item. Write the letter of the correct answer on your paper.**

4.)  $\frac{12}{30}$

A.  $\frac{2}{5}$  B.  $\frac{4}{5}$  C.  $\frac{3}{5}$

5.)  $\frac{18}{45}$

A.  $\frac{3}{5}$  B.  $\frac{1}{5}$  C.  $\frac{2}{5}$



Key To Answer

What's In(Balikan)
1. $2\frac{1}{5}$
2. $8\frac{3}{4}$
3. $1\frac{3}{6}$
4. $\frac{19}{7}$
5. $\frac{36}{5}$
What's New(Tuklasin)
1. $\frac{34}{7}$
2. $3\frac{1}{4}$
3. brothers
1. He cut a whole pizza into 8 equal parts.
5. $\frac{2}{8}$ , $\frac{6}{8}$
What Is It (Suriin)
1. $6\frac{1}{2}$
2. $1\frac{1}{12}$
3. $3\frac{1}{7}$

What's More (Pagyamanin)
1. 2
2. 25
3. 1
4. 1
5. 3
What I Can Do (Isagawa)
1.) $\frac{25}{4}$
2.) $1\frac{1}{5}$
3.) $\frac{1}{2}$
4.) 8
5.) 3
Post Assessment
1. A
2. C
3. B
4. A
5. C

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