



Mathematics 4 Microlearning Modules

QUARTER 3 – Module 9

Adding and Subtracting Dissimilar **Fraction Using Models**





REGION XII - DIVISION OF SULTAN KUDARAT

Mathematics 4 Microlearning Module (MLM) Quarter 3. LC.9 Adding And Subtracting Dissimilar Fraction With Models First Edition, 2024

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Published by the Department of Education- RO XII, Division of Sultan Kudarat

		Development Team	
Writer	:	Ludevina L. Tumlad, Jocelyn R. Andasan	
Editors	:	Abner Gallo, Roger B. Famulag	
Evaluator	:	Renante S. Gura	
Illustrators	:	Ludevina L. Tumlad, Jocelyn R. Andasan	
Cover Art Designer:		Jann Mark P. Oriel	
Management Team:		Crispin A. Soliven Jr., CESE – Schools Division Superintendent	
		Meilrose B. Peralta EdD – Asst. Schools Division Superintendent	
		Ismael M. Ambalgan – Chief, CID	
		Sheryl L. Osano – EPS, LRMS	
		Rodolfo B. Bermudo Jr. EdD – EPS, Mathematics	

Printed in the Philippines by

Department of Education – Region XII, Division of Sultan Kudarat

Office Address: Kenram, Isulan, Sultan Kudarat Telefax: 064-471-1007 E-mail Address: depedsk.r12@deped.gov.ph

MICROLEARNING MODULE

Name:	Grade & Sec:	Score:
Subject:	Quarter: <u>3</u>	MLM No. <u>9</u>
Teacher:		
Competency:	Add and subtract dissimilar fractions usin	g models.

A. Look Back!

Put a check (\checkmark) if the given fraction is in its lowest term, and (X) if it is NOT.

 $- 1. \frac{3}{7} \qquad - 2. \frac{2}{28} \qquad - 3. \frac{8}{14}$

Follow the steps carefully.

- 1. List factors for both numerator and denominator.
- 2. Circle the least common factor.
- 3. Divide the numerator and the denominator by the common factor.

Find the common factor of the following fractions.

1. $\frac{5}{15}$ 2. $\frac{14}{20}$ 3. $\frac{9}{27}$

B. What's New?



C. What Is It?

Add and Subtract Dissimilar Fractions with Models

Mang Joaquin painted the fence for 2 hours, the windowpanes for $\frac{1}{2}$ of the hour, and the door for $\frac{1}{4}$ hour. How many hours did Mang Joaquin spend painting? How many more hours did Mang Joaquin spend painting windowpanes than painting the door?

Follow the steps in answering the problem.



So, Mang Joaquin painted $2\frac{3}{4}$ hours.

Follow the same process on the second problem using subtraction:



Mang Joaquin spent $^{1}\!\!/_{4}$ hour more painting window panes than painting the door.

To add dissimilar fractions, study these steps carefully.



To subtract dissimilar fractions, study these steps carefully.



D. Let's try!

Directions: Analyze and solve the problem. Show your solution.

Alma went to the grocery store to buy $\frac{1}{2}$ a kilogram of cabbage and $\frac{1}{8}$ kilogram of another variety of cabbage. Her mother used $\frac{1}{4}$ kilograms of cabbage for *Pancit*. How many kilograms of cabbage were left?

- 1. What did Alma buy?
- 2. How many kilograms of cabbage did Alma buy from the grocery?
- 3. How many kilograms of cabbage did her mother use for Pancit?
- 4. How many kilograms were left?

Instruction: Add or subtract the following fractions and reduce to the lowest term.

1. 8	2. 6	3. 2	4. 4	5. $\frac{3}{4}$
3	4	3	2	2
4	9	7	3	- 3
$+\frac{1}{2}$	$+\frac{2}{2}$	$+\frac{1}{2}$	·	
6	3	2		

E. Let's Evaluate

- A. Directions: Add or subtract the following fractions and reduce them to the lowest term.
 - $1 \cdot \frac{5}{8} + \frac{1}{2} =$ $2 \cdot \frac{3}{4} + \frac{1}{3} =$ $3 \cdot \frac{5}{6} \frac{1}{4} =$ $4 \cdot \frac{3}{5} \frac{1}{2} =$ $5 \cdot \frac{4}{5} \frac{1}{3} =$
- B. Directions: Analyze and solve the problem. Show your solution. Write your answer on a separate sheet. (5pts)

Mrs. Santos has $\frac{2}{3}$ meter of red lace. Her daughter gave her. $\frac{1}{4}$ meter of yellow lace. How many more meters of red lace does Mrs. Santos have than yellow lace?

Challenge!

Fill in the missing fraction in the box. Follow the steps in adding and subtracting fractions.



F. References

- Department of Education (DepEd). *Mathematics Matatag Curriculum Guide*. Manila: Department of Education, 2023.
- Tabilang, Alma R., Ian Jay B. Arce, Rodrigo V. Pascua, Nelma P. Calayag, Lolita P. Dacula, Dioleta B. Borais, Rafael B. Buemia, Myrna T. Collao, and Larry G. Morandante. *Mathematics 4: Learner Materials*. Manila: Department of Education, 2015.

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Answer Key: Mathematics 4 Quarter 3, LC.9.

A. Look Back 1. a. / b. X c. x 2. a. 5 b. 2 c. 9

D.). Let's try:				
	1.	a. Alma buy $\frac{1}{2}$ kilogram of cabbage, and $\frac{1}{8}$ kilogram of cabbage.			
		b. $\frac{3}{8}$ total kilogram of cabbage			
		c. $\frac{3}{4}$ Kilogram of cabbage			
		d. $\frac{1}{8}$ kilogram left			
		e. Answers may vary			
	2.	a. 8 $\frac{11}{12}$ b. 1 $\frac{1}{9}$			
		c. $2\frac{13}{14}$ d. $3\frac{1}{2}$			
		e. $\frac{1}{12}^2$			



