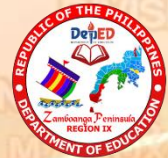


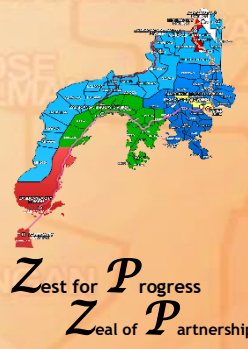
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*Madaginton*
- OCTOBER**  
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- NOVEMBER**  
*Masaligan*
- DECEMBER**  
*Maalampon*



Republic of the Philippines  
**Department of Education**  
 Regional Office IX, Zamboanga Peninsula



3



# MATHEMATICS

## 4<sup>th</sup> QUARTER – Module 2: SOLVING PROBLEM INVOLVING TIME MEASURE



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

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

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

**Mathematics- Grade 3**  
**Alternative Delivery Mode**  
**Quarter 4 - Module 2: Problem Solving Involving Time Measure**  
**First Edition, 2020**

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Published by the Department of Education  
Secretary: Leonor Magtolis Briones  
Undersecretary: Diosdado M. San Antonio

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Printed in the Philippines  
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# Introductory Message

This Self – Learning Module (SLM) is prepared so that you, our dear learners, can continue your studies and learn while at home. Activities, questions, directions, exercises, and discussions are carefully stated for you to understand each lesson.

Each SLM is composed of different parts. Each part shall guide you step-by-step as you discover and understand the lesson prepared for you.

Pre-tests are provided to measure your prior knowledge on lessons in each SLM. This will tell you if you can proceed on completing this module or if you need to ask your facilitator or your teacher’s assistance for better understanding of the lesson. At the end of each module, you need to answer the post-test to self-check your learning. Answer keys are provided for each activity and test. We trust that you will be honest in using these.

In addition to the material in the main text, notes to the Teacher are also provided to our facilitators and parents for strategies and reminders on how they can best help you on your home-based learning.

Please use this module with care. Do not put unnecessary marks on any part of this SLM. Use a separate sheet of paper in answering the exercises and tests. Read the instructions carefully before performing each task.

If you have any questions in using this SLM or any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator.

Thank you.



## What I Need to Know

### Learning Competency:

The learner solves problems involving conversion of time measure.



## What I Know

**Directions:** Answer the word problem. Write your answer on a separate sheet.

1. Rowel walked to school for 1 hour and 10 minutes. How many minutes are there in 1 hour and 10 minutes?

2. Angie traveled for 24 hours from Zamboanga to Cebu via land. How many days does it take for her to reach Cebu?

## LESSON

## SOLVING PROBLEM INVOLVING CONVERSION OF TIME MEASURE



### What's In

**Directions:** Choose the letter of the correct answer. Write your answer on a separate sheet.

- 3 minutes = \_\_\_\_\_seconds  
A. 180                      B. 190                      C. 200                      D. 210
- 2 hours = \_\_\_\_\_ minutes  
A. 100                      B. 105                      C. 115                      D. 120
- 48 hours = \_\_\_\_\_days  
A. 8 days  $\frac{1}{2}$               B. 1                      C. 2                      D. 2  $\frac{1}{2}$
- 104 days = \_\_\_\_\_ years  
A. 1                      B. 2                      C. 3                      D. 4
- 21 days = \_\_\_\_\_ weeks  
A. 1                      B. 2                      C. 3                      D. 4



### What's New

Read and study the given problem.

Bimboy stayed in the library for 240 minutes. How many hours did he stay in the library?

Let us answer.

- Who stayed in the library? **Bimboy stayed in the library**
- How many hours did he stay in the library? **Bimboy stayed in the library for 4 hours. Since there are 60 minutes in 1 hour.**

$$240 \text{ minutes} \div 60 \text{ minutes} = 4 \text{ hours}$$



## What is It

Let us study another problem.

Every weekend, Jaja helps her mother wash their clothes. They start washing at 8:30 a.m. and finish at 11:30 a.m. How many minutes does it take for them to wash their clothes?

Study the solution below.

### A. Understand

- Asked number of minutes spent washing
- Given facts 8:30 am, 11:30 am

### B. Plan

- Operation/s to use Subtraction and multiplication
- Number sentence 11:30 am – 8:30am = N  
Number of hours x 60 mins = minutes

### 3. Solve.

- Solution

$11:30 - \text{time ended washing}$	$1 \text{ hour} = 60 \text{ minutes}$
$- 8:30 - \text{time started washing}$	$3 \text{ hours} \times 60 \text{ minutes} = 180 \text{ minutes}$
$3:00 \text{ hours}$	

### 4. Check.

- Go over and check your answer.



## What's More

**Directions:** Solve the following problems. Write your answer on a separate sheet of paper.

1. Marie worked on her project in 7200 seconds. How many minutes did Marie work on her project?
2. Rowel spent 4 hours answering his module and 1 hour doing household chores. How many minutes did he spend in two activities that day?



3. Mr. Reyes worked abroad for four years. How many months did he work abroad? How many weeks?



## What I Have Learned

To find the **equivalent unit of time**, we **multiply** if we convert a **larger unit into a smaller unit**, and we **divide** if we are converting a **smaller unit into a larger unit**.

- **For the solution, follow these 4 – steps.**
  - 1. Understand**
    - What is asked?
    - What are the given facts?
  - 2. Plan**
    - What operation to use?
    - What is the number sentence?
  - 3. Solve**
    - Show your solution
  - 4. Check**
    - Go over and check your answer
    - Or by making a pattern.



## What I Can Do

**Directions:** Read and answer the word problem. Write the letter on a separate sheet of paper.

1. Rene takes 1 hour and 25 minutes to prepare himself in going to school. How many minutes in 1 hours and 25 minutes?  
A. 55 minutes   B. 85 minutes   C. 105 minutes   D. 125 minutes
  
2. Kevin spent his vacation in Baguio for 18 days and ten days in Tagaytay. How long did he spend his vacation in weeks?  
A. 2 weeks      B. 4 weeks      C. 6 weeks      D. 7 weeks

3. Jude spends one hour playing and 1 hour and 20 minutes doing his assignment. How many seconds does he spend doing the two activities?

A. 5 000 seconds

C. 8 400 seconds

B. 5 200 seconds

D. 5 600 seconds



## Assessment

**Directions:** Read each item carefully. Choose the letter of the correct answer. Write your answer on a separate sheet of paper.

1. Jerome left his house at 6:45 a.m. He arrived at his workstation at 7:20 a.m. How many minutes did it take him to travel from his house to his workstation?

A. 35 minutes    B. 36 minutes    C. 37 minutes    D. 38 minutes

2. Irene spent 3 hours a day answering her module. How many seconds did she spend doing her module?

A. 10 800 seconds

C. 10 600 seconds

B. 18 000 seconds

D. 18 600 seconds

3. A school variety show performs 180 minutes on Friday and 240 minutes on Saturday. How many hours do they perform every week?

A. 7 hours

B. 10 hours

C. 180 minutes

D. 240 minutes

4. James started working on his project on December 23, 2020 and finished it on January 6, 2021. How many weeks did it take him to finish his project?

A. 2 weeks

B. 10 days

C. 3 weeks

D. 1 month

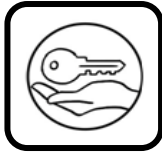
5. Andy and his family prepared for 5 years before going on their first vacation. How many months did it take them to prepare for their vacation?

A. 5 years

B. 5 months

C. 30 months

D. 60 months



## Answer Key

**What's In:** (1) 70 min. (2) 1 day

**What's New:** (1) A (2) D (3) C (4) B (5) C

**What's More:** (1) 120 minutes (2) 300 minutes (3) 48 months, 208 weeks

**What I Can Do:** (1) B (2) B (3) C

**Assessment:** (1) A (2) B (3) A (4) A (5) D

## References:

Ofelia G. Chingcuangco et. al., Mathematics – Grade 3 Teacher's Guide. Pasig City: Philippine Rex Books Store Inc., 2015, 288 – 290.

Aurea V. De la Paz, *Realistic Math 3*, Quezon City: Sibs Publishing House, Inc., 2011, 391 – 394.

Agnes V. Canilao et al., Elementary Mathematics Grade 3 Lesson Guide, ALKEM Company.