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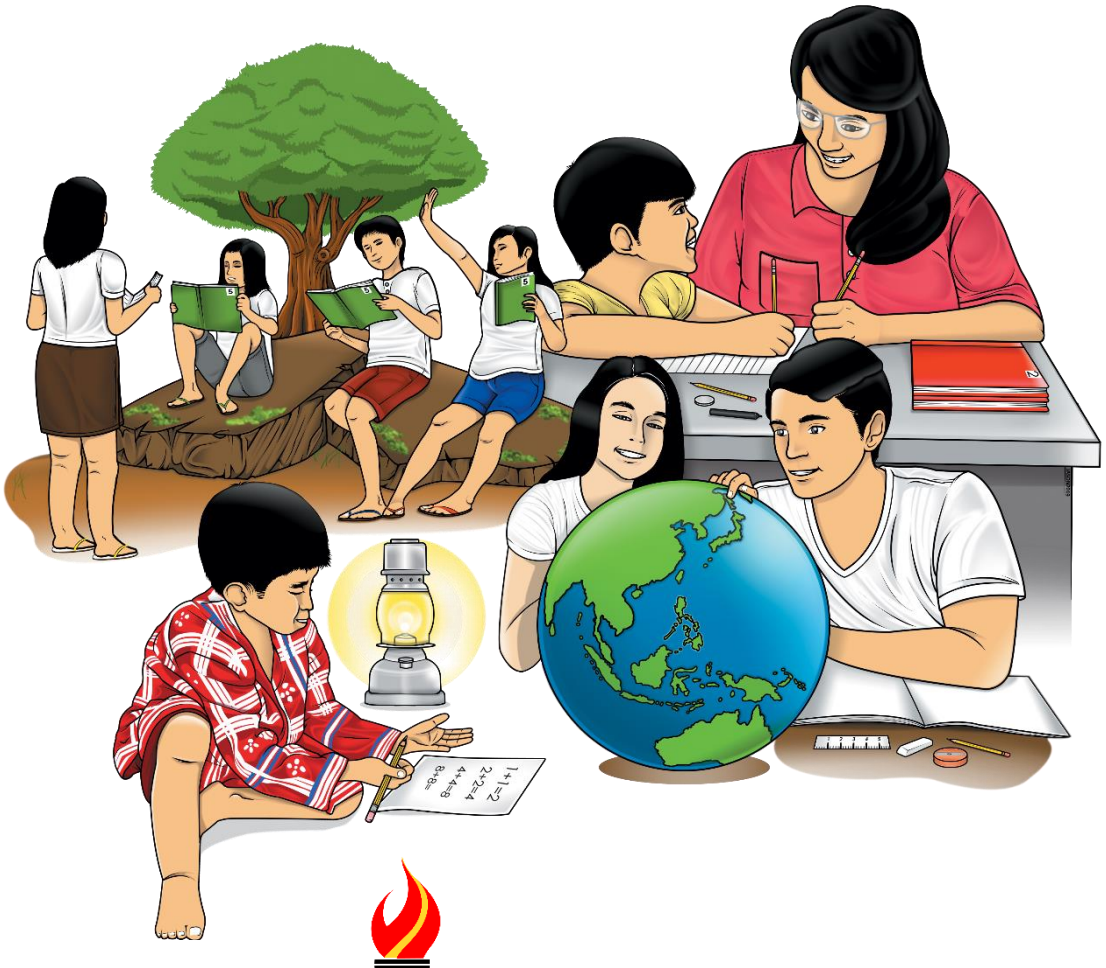
# Mathematics

## Quarter 1 – Module 13:
## Subtracting 3 to-4 Digit Numbers from 3 to-4 Digit Numbers



ALTERNATIVE DELIVERY MODE
ADM

**Mathematics – Grade 3**
**Alternative Delivery Mode**
**Quarter 1 – Module 13: Subtracting 3 to-4 Digit Numbers from 3 to-4 Digit Numbers**
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3

# Mathematics

## Quarter 1 – Module 13:
## Subtracting 3 to-4 Digit Numbers from 3 to-4 Digit Numbers

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# Introductory Message

## For the facilitator:

Welcome to the Grade 3 Mathematics Alternative Delivery Mode (ADM) Module on **Subtracting 3 to-4 Digit Numbers from 3 to-4 Digit Numbers!**

This module was collaboratively designed, developed and reviewed by educators both from public and private institutions to assist you, the teacher or facilitator in helping the learners meet the standards set by the K to 12 Curriculum while overcoming their personal, social, and economic constraints in schooling.

This learning resource hopes to engage the learners into guided and independent learning activities at their own pace and time. Furthermore, this also aims to help learners acquire the needed 21st century skills while taking into consideration their needs and circumstances.

As a facilitator, you are expected to orient the learners on how to use this module. You also need to keep track of the learners' progress while allowing them to manage their own learning. Furthermore, you are expected to encourage and assist the learners as they do the tasks included in the module.

## For the learner:

Welcome to the Grade 3 Mathematics Alternative Delivery Mode (ADM) Module on **Subtracting 3 to-4 Digit Numbers from 3 to-4 Digit Numbers!**

This module was designed to provide you with fun and meaningful opportunities for guided and independent learning at your own pace and time. It was made easy for you to process the contents of the learning resource while being an active learner.

This module has the following parts and corresponding icons:

*What I Need to Know*

This will give you an idea of the skills or competencies you are expected to learn in the module.

*What I Know*

This part includes an activity that aims to check what you already know about the lesson to take. If you get all the answers correct (100%), you may decide to skip this module.

*What's In*

This is a brief drill or review to help you link the current lesson with the previous one.

*What's New*

In this portion, the new lesson will be introduced to you in various ways such as a story, a song, a poem, a problem opener, an activity or a situation.

*What is It*

This section provides a brief discussion of the lesson. This aims to help you discover and understand new concepts and skills.

| | |
|---|---|
|  *What's More* | This comprises activities for independent practice to solidify your understanding and skills of the topic. You may check the answers to the exercises using the Answer Key at the end of the module. |
|  *What I Have Learned* | This includes questions or blank sentence/paragraph to be filled in to process what you learned from the lesson. |
|  *What I Can Do* | This section provides an activity which will help you transfer your new knowledge or skill into real life situations or concerns. |
|  *Assessment* | This is a task which aims to evaluate your level of mastery in achieving the learning competency. |
|  *Additional Activities* | In this portion, another activity will be given to you to enrich your knowledge or skill of the lesson learned. |
|  *Answer Key* | This contains answers to all activities in the module. |

At the end of this module you will also find:

| | |
|---|---|
| *References* | This is a list of all sources used in developing this module. |

The following are some reminders in using this module:

1. Use the module with care. Do not put unnecessary mark/s on any part of the module. Use a separate sheet of paper in answering the exercises.
2. Don't forget to answer *What I Know* before moving on to the other activities included in the module.
3. Read the instruction carefully before doing each task.
4. Observe honesty and integrity in doing the tasks and checking your answers.
5. Finish the task at hand before proceeding to the next.
6. Return this module to your teacher/facilitator once you are through with it.

If you encounter any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator. Always bear in mind that you are not alone.

We hope that through this material, you will experience meaningful learning and gain deep understanding of the relevant competencies. You can do it.

# *What I Need to Know*

This module was designed and written with you in mind. The scope of this module permits it to be used in many different learning situations. The lessons are arranged to follow the standard sequence of the course but the order in which you read them can be changed to correspond with the Mathematics Grade 3 learning materials you are using.

After going through this module, you are expected to:

1. Subtract 3 to-4 Digit Numbers from 3 to-4 Digit Numbers.

Enjoy your journey. Good luck!

# *What I Know*

Compute the following:

1.) 5 489
- 476

A. 5 310 B. 5 013 C. 5 130 D. 5 031

2.) 6 548
- 2 432

A. 4 110 B. 4 113 C. 4 110 D. 4 116

3.) 8 106
- 985

A. 7 121 B. 8 121 C. 7 131 D. 8 131

4.) 634
- 579

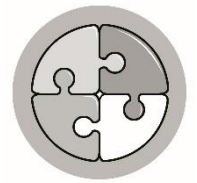
A. 53 B. 55 C. 61 D. 65

5.) 3 633
- 3 566

A. 56 B. 67 C. 78 D. 89

# Lesson Subtracts 3 to-4-Digit Numbers from 3 to-4-Digit Numbers without and with Regrouping

There are so many instances in life when you need to solve things involving subtraction of whole numbers. In playing, buying anything, paying debts and many other situations, we need to be aware on how to subtract numbers in order for us to get the right value of the thing we dealt with. If you intend to buy something, you count the money the store gave to you as change. Thus, in many circumstances in your day to day life, you applied your subtraction skills, may it be with or without regrouping.



## *What's In*

Let us review the concept of problems involving addition including money that you have learned in the previous lessons by answering the following questions.

1.) Mario has 456 marbles and Roy has 231 chips. How many toys do the two boys have?

2.) Christine bought 1 pad of paper at ₱19.50 and a piece of pencil at ₱8.50. How much did she spend in all?

3.) Find the value of 479 added to 635?

4.) Francis combined his 500 toy cards to that of Mark which has 700 toy cards. How many toy cards do the two boys have?

5.) Mother bought fruits at ₱343.00, vegetables at ₱ 263.00, and pork meat at ₱600.00. How much money did mother spend in all?

# What's New

In the previous lesson, you performed addition operation through expanded form. In subtracting numbers, we can also apply the expanded form method.

## Activity 1

Use expanded method to subtract the given numbers.

1.) 9 452 → 9 000 + 400 + 50 + 2
- 7 231 - 7 000 + 200 + 30 + 1
[ ] ← [ ]

2.) 5 356 → 5 000 + 300 + 50 + 6
- 2 143 - 2 000 + 100 + 40 + 3
[ ] ← [ ]

3.) 734 → 700 + 30 + 4
- 322 - 300 + 20 + 2
[ ] ← [ ]

4.) 6 467 → 6 000 + 400 + 60 + 7
- 465 - 400 + 60 + 5
[ ] ← [ ]

The expanded method in subtracting numbers is said to be the long method when we subtract numbers involving large digits.

As you go along the course of this module you will be able to learn the basic method of subtracting numbers.

## *What is It*

For this lesson, you will focus in subtracting 3 to-4 digit numbers from 3 to-4 digit numbers with or without regrouping.

Example: 9 875 – 8 641 = ?

Study carefully the table below. Take note of how the answer is obtained. Remember that the process of obtaining the answer is as important as the answer itself.

| 1. Subtract the **ones.** | 2. Subtract the **tens.** | 3. Subtract the **hundreds.** | 4. Subtract the **thousands.** |
|---|---|---|---|
| 9 87**5**<br>- 8 64**1**<br>**4** | 9 8**7**5<br>- 8 6**4**1<br>**3**4 | 9 **8**75<br>- 8 **6**41<br>**2**34 | **9** 875<br>**-** **8** 641<br>**1** 234 |

Checking:

In checking, try to add the difference and the subtrahend. If the sum will be the minuend, then your difference is correct. See example below.

| | | | |
|---|---|---|---|
| | 9 875 | | 1 234 |
| - | 8 641 | + | 8 641 |
| | 1234 | | 9 875 |

The **minuend** is 9 875 while the number to be subtracted or the **subtrahend** is 8 641.The answer is the **difference.** The **difference** between **9 875** and **8 641** is **1 234.** The table above shows a systematic way of answering the equation. You indicate what you want to find, and what you need to do. You used subtraction in order to find the difference of the whole numbers.

Observe how the minuends and the subtrahends are properly aligned so that all the ones, tens, hundreds, and thousands digits are written in their respective columns.

The subtraction process in our previous example is a case in which each digit of the subtrahend is less than to its corresponding digit in the minuend. Such process is called **subtracting numbers without regrouping.**

In the next example, we will show a case where the digits of the subtrahend are greater than their corresponding digits in the minuend. Cases like this will undergo **subtracting numbers with regrouping**.

Example: 9 547 – 658 = ?

| Subtract the ones. Regroup. | Subtract the tens. Regroup. | Subtract the hundreds. Regroup. | Subtract the thousands. Regroup. |
|---|---|---|---|
| 3 17<br>9 5 ~~4~~ **~~7~~**<br>- 6 5 **8**<br>**9** | 13<br>4 ~~3~~ 17<br>9 ~~5~~ **~~4~~** ~~7~~<br>- 6 **5** 8<br>**8** 9 | 14 13<br>8 ~~4~~ ~~3~~ 17<br>~~9~~ **~~5~~** ~~4~~ ~~7~~<br>- **6** 5 8<br>**8** 8 9 | 14 13<br>8 ~~4~~ ~~3~~ 17<br>**~~9~~** ~~5~~ ~~4~~ ~~7~~<br>- 6 5 8<br>**8** 8 8 9 |

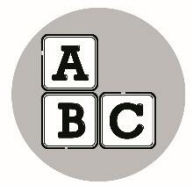
The method above tells you how to subtract numbers with regrouping. The minuend is 9 547 and the subtrahend or the number to be subtracted is 658. The difference is 8 889.

In summary, **when subtracting numbers,** follow these simple steps:

**Step 1.** Align the digits properly by writing all the ones, tens, hundreds, and thousands in their respective columns.

**Step 2.** Start subtracting from the rightmost place to the leftmost place.

**Step 3.** Regroup whenever the digit in the subtrahend is greater than the digit in the minuend.



## *What's More*

Subtract the following.

| 1. | 2. | 3. | 4. | 5. |
|---|---|---|---|---|
| 8 537 | 7 642 | 9 752 | 6 430 | 762 |
| - 3 154 | - 4 321 | - 3 863 | - 551 | - 673 |

## *What I Have Learned*

In subtracting 3 to-4 digit numbers from 3 to-4 digit numbers, be sure to align all the ones, tens, hundreds, thousands properly so that it will not be difficult for you to subtract.

1. The bigger or the larger number must be your minuend and be sure to write it on top or it must be written first.
2. The smaller or the lesser number must be written next or at the bottom of the larger number as the subtrahend.
3. Do not forget to regroup the ones, tens, hundreds, thousands, whenever the digit in your subtrahend is larger than its corresponding digit in the minuend.
4. Look back.
   You need to check if your answer is correct. Add the difference and the subtrahend to be sure that your answer is correct. When the sum is congruent with your minuend, therefore your difference is right.

## *What I Can Do*

Find what number is being asked.

1. What is the difference between 8 753 and 962?
2. What number is 320 less than 1 975?
3. Subtract 514 from 2 469?
4. What is 6 788 less than 899?
5. Take away 485 from 3 274.

## *Assessment*

Fill in the box with the correct difference. Check your answer by adding your difference and the subtrahend. Do this on your paper.

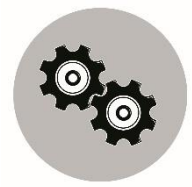
1.) 8 325
- 3 124
☐

2.) 6 546
- 3 657
☐

3.) 7 432
- 323
☐

4.) 843
- 564
☐

5.) 10 421
- 3 210
☐



# *Additional Activities*

Table of fruits harvested in a farm.

| Fruits | Variety | Number of Fruits | Total |
|---|---|---|---|
| Mango | Apple Mango | 568 | 1 011 |
| | Carabao Mango | | |
| Banana | Lakatan | 443 | |
| | Latundan | | |

Answer the questions below.

1. How many Apple Mangos are there if there are 253 Carabao Mangos?
2. How many Latundan are there if there are 275 Lakatan bananas?
3. How many fruits are left when 253 Carabao Mangos were sold?
4. How many fruits are left when 275 Lakatan were sold?

# Answer Key

### What I Know

1) B
2) D
3) A
4) B
5) B

### What's In

1) 687
2) ₱28.00
3) 1 114
4) 1 200
5) ₱1,206.00

### What's New

1. 16000 + 600 + 80 + 3 = 16683
2. 7,000 + 400 + 90 + 9 = 7499
3. 1000 + 50 + 6 = 1056
4. 6,000 + 800 + 120 +12 = 6,932

### What's More

| |
|---|
| 1.) 5383 |
| 2.) 3321 |
| 3.) 5889 |
| 4.) 5879 |
| 5.) 89 |

### What I Can Do

| |
|---|
| 1.) 7791 |
| 2.) 1655 |
| 3.) 1955 |
| 4.) 5889 |
| 5.) 2789 |

### Assessment

| |
|---|
| 1) 5201 |
| 2) 2889 |
| 3) 7109 |
| 4) 279 |
| 5) 7211 |

### Additional Activity

| |
|---|
| 1.) 315 |
| 2.) 168 |
| 3.) 758 |
| 4.) 736 |

# *References:*

K to 12 Curriculum Guide in Math 3

K to 12 Teacher's Guide in Math 3 Lesson Guide in Elementary Mathematics 3 (2010), pages 134-135

Discovering Mathematics Today, pages 44-47

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