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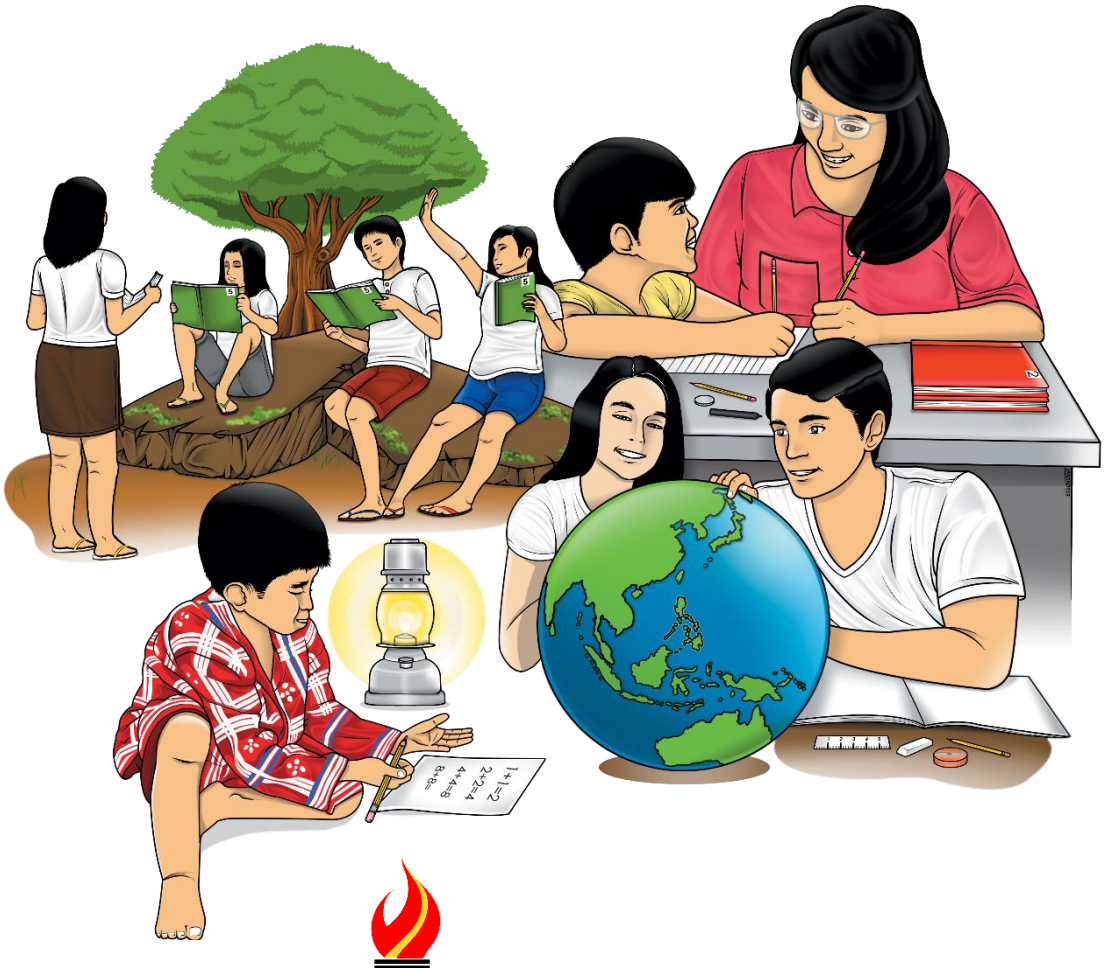
Mathematics

Quarter 1 – Module 11(b):
Adding Mentally 2-3 Digit Numbers



ALTERNATIVE DELIVERY MODE
ADM

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Mathematics – Grade 3
Alternative Delivery Mode
Quarter 1 – Module 11(b): Adding Mentally 2-3 Digit Numbers
First Edition, 2020

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Mathematics

Quarter 1 – Module 11(b):
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Introductory Message

For the facilitator:

Welcome to the Mathematics Alternative Delivery Mode (ADM) Module on **Adding Mentally 2-3 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 Mathematics Alternative Delivery Mode (ADM) Module on **Adding Mentally 2-3 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. It is here to help you master on adding mentally 2-3 digit numbers with multiples of hundreds using appropriate strategies. The scope of this module permits it to be used in many different learning situations. The language used recognizes your diverse vocabulary backgrounds. 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. Add mentally 2-3 digit numbers with multiples of hundreds using appropriate strategies (M3NS-Ie-28.8).

Enjoy your journey. Good luck!

What I Know

Add the following mentally. Choose the letter of the correct answer. Write the chosen letter on a separate sheet of paper.

1. 43 + 26

2. 23 + 300

3. 500 + 300

4. 93 + 37

5. 500 + 600

a. 323

b. 69

c. 800

d. 1100

e. 130

Lesson Adds Mentally 2-3 Digit Numbers with Multiples of Hundreds

In our daily living, we use math, specially the four fundamental operations. Addition is one and the most commonly used in our day to day experience. We sometimes go to supermarket bringing estimated amount of money for payment. But the question is, do we need to bring paper and pen or calculator all the time to compute the total amount of things we need to buy? It is important that we can add mentally the prices we see. In this lesson we will learn how to add mentally 2- to 3-digit numbers with multiples of hundreds.

What's In

Answer the following by filling in the blanks with the correct answer.

1. 20 + 60 + 8
   = 8 + ____
   = _____

2. 10 + 20 + 4 + 7
   = ____ + ____
   = _____

3. 2 + 60 + 80
   = 2 + ____
   = _____

4. 80 + 90 + 3 + 2
   = ___ + ___
   = _____

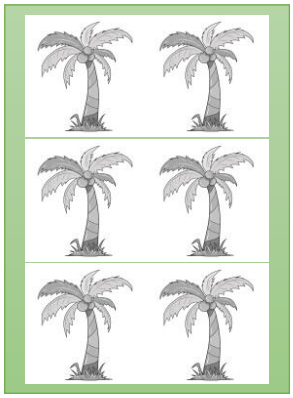
5. 10 + 30 + 5 + 4
   = ____+ ____
   = _____

What's New

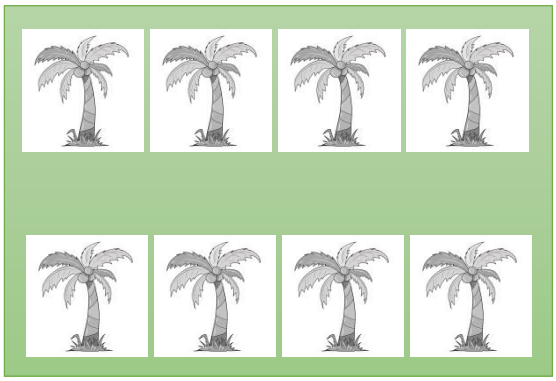
We learned in the previous lesson that in adding numbers mentally, it is easy to calculate when the addends are expanded to tens. In the example below let us try to add numbers in hundreds.

Problem:

Charles coconut plantation has two different locations, location A and location B. The illustration below shows the number of coconut trees in each location. How many coconut trees are planted in each location?



Location **A**



Location **B**

Legend:

1 coconut tree = 100

Location	Number of Coconut Trees
A	600
B	800
Total	?

Do you have any idea how to solve 3-digit numbers? If your answer is **1400** then you got the answer correctly. Can you find the total by adding it mentally?

What is It

Remember your knowledge in adding mentally 2-digit number to 1-digit number. First step is to expand the 2-digit addend into tens and ones. This is because it is easy to add mentally numbers in its tens and ones.

To add 2-digit numbers mentally, we will apply the same strategy in which we will expand both addends to its tens and ones. Then, add tens and ones separately. This strategy will work in all addition with or without regrouping.

Example: Add mentally 24 + 59.

Solution:

Step 1. expand into tens and ones $24 = 20 + 4$
$59 = 50 + 9$

Step 2. add tens and ones separately

$24 + 59 = (20 + 4) + (50 + 9) = \underline{20 + 50} + \underline{4 + 9}$

$= 70 + 13$

Step 3. Add $= 83$

Answer: **24 + 59 = 83**

To add mentally 3-digit number with multiples of hundreds and 2-digit number, simply replace the two zeros of the number in hundreds with the 2-digit addend number.

Example: Add mentally 700 + 68.

Solution:

Step 1. Identify number in hundreds. 7<u>00</u>
Step 2. replace two zeros with the 2-digit number. 7<u>68</u>

Answer: **700 + 68 = 768**.

To add mentally two 3-digit numbers with multiples of hundreds, just add their corresponding digits starting from ones, tens then hundreds. The addition can be done mentally with ease since the process is without regrouping.

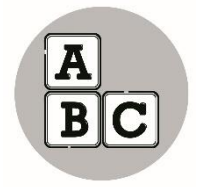
Example: Add mentally 900 + 893.

Solution:

Add the corresponding digits.

$$\begin{array}{r} 900 \\ +\ 893 \\ \hline 1793 \end{array}$$

Answer: **900 + 800 = 1 700**.



What's More

Find the sum mentally.

1.) $\begin{array}{r} 13 \\ +\ 50 \\ \hline \end{array}$ 2.) $\begin{array}{r} 35 \\ +\ 66 \\ \hline \end{array}$ 3.) $\begin{array}{r} 61 \\ +\ 17 \\ \hline \end{array}$ 4.) $\begin{array}{r} 76 \\ +\ 34 \\ \hline \end{array}$ 5.) $\begin{array}{r} 43 \\ +\ 68 \\ \hline \end{array}$

6.) $\begin{array}{r} 400 \\ +\ 57 \\ \hline \end{array}$ 7.) $\begin{array}{r} 100 \\ +\ 99 \\ \hline \end{array}$ 8.) $\begin{array}{r} 768 \\ +\ 200 \\ \hline \end{array}$ 9.) $\begin{array}{r} 230 \\ +\ 800 \\ \hline \end{array}$ 10.) $\begin{array}{r} 500 \\ +\ 900 \\ \hline \end{array}$

What I Have Learned

To add 2-digit numbers mentally, apply the same strategy in which you will expand both addends to its tens and ones. Then, add tens and ones separately.

To add mentally 3-digit number with multiples of hundreds and 2-digit number, simply replace the two zeros of the number in hundreds with the 2-digit addend number.

To add mentally two 3-digit numbers with multiples of hundreds, just add their nonzero digits then write two zeros to the right of the sum.

What I Can Do

Add mentally.

1.) 54 + 61 =

2.) 50 + 34 =

3.) 21 + 39 =

4.) 23 + 58 =

5.) 63 + 79 =

6.) 72 + 400 =

7.) 600 + 70 =

8.) 349 + 200 =

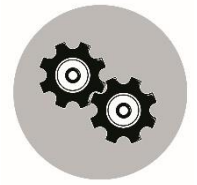
9.) 200 + 813 =

10.) 600 + 700 =

Assessment

Add mentally. Write your answer on the space provided.

1. 10 + 90 _____	2. 100 + 805 _____	3. 56 + 80 _____	4. 26 + 20 _____	5. 72 + 35 _____
6. 657 + 500 _____	7. 700 + 93 _____	8. 87 + 96 _____	9. 88 + 37 _____	10. 700 + 500 _____



Additional Activities

Word Problem

Solve the problem mentally. Write the correct answer on a separate sheet.

1. There are 500 men and 469 women working in the supermarket. How many people are working in the supermarket altogether?

2. There are 34 English books, 48 Filipino books and 100 MTB books in the school library.

   a. How many English and MTB books are there in the school library?
   b. How many Filipino and English books are there?
   c. How many Filipino and MTB books altogether?

What I Know

1. B
2. A
3. C
4. E
5. D

What's In

1. 8 + 80 = 88
2. 30 + 11 = 41
3. 2 + 140 = 142
4. 170 + 5 = 175
5. 40 + 9 = 49

What's More

1. 63
2. 101
3. 77
4. 110
5. 111
6. 457
7. 199
8. 968
9. 1 030
10. 1 400

What I Can Do

1. 115
2. 84
3. 60
4. 81
5. 142
6. 472
7. 670
8. 549
9. 1 013
10. 1 300

Assessment

1. 100
2. 905
3. 136
4. 46
5. 107
6. 1 157
7. 793
8. 183
9. 125
10. 1 200

Additional Activity

1. 969

2. a. 134

   b. 82

   c. 148

Answer Key

References

Yun, Xander. 1st ed. 2014. The New Syllabus Primary Mathematics. Rex Book Store.

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