



Republic of the Philippines

Department of Education

Regional Office IX, Zamboanga Peninsula



5



MATHEMATICS

2ND QUARTER – Module 3: ADDITION/SUBTRACTION OF DECIMALS



| Name | of I | Learner: |
|------|------|----------|
| | | |

Grade & Section:

Name of School:

Mathematics- Grade 5 Alternative Delivery Mode

Quarter 2 - Module 3: Addition/Subtraction of Decimals

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Development Team of the Module

Writer: Marisa L. Olihe

Editor: Agustina P. Magalso Reviewer: Ismael K. Yusoph

Management Team: SDS: Ma. Liza R. Tabilon

ASDS: Judith V. Romaguera

OIC-ASDS: Ma. Judelyn J. Ramos OIC-ASDS: Armando P. Gumapon

CID Chief: Lilia E. Abello LR: Evelyn C. Labad

PSDS: Reynaldo S. Alacala Principal: Amelita G. Sappal

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Office Address: Tiguma, Airport Road, Pagadian City

Telefax:

E-mail Address:



What I Need to Know

After surpassingly doing the activities of this module, you are expected to solve routine and non-routine problems involving addition and subtraction of decimal numbers including money using appropriate problem solving strategies and tools. (M5NS-IIc-108.1)

The goal in Mathematics education is to help and provide you learning experiences that will encourage you to expect and achieve more in this area. The activities of this module are written to further improve your critical thinking, recognize and represent decimals in various forms and context. These acquired skills would soon make a difference in your learning which is essential in your development towards becoming young responsible citizens.

So, find time to study this module and let's build a responsible mathematical community amidst COVID-19 pandemic.

We are with you every step of the way. Good luck, stay safe and God bless.

Solving Routine and Non-routine Problems Involving Addition and Subtraction of Decimal Numbers Including Money Using Appropriate Problem Solving Strategies and Tools



What's In

Activity 1

Arrange and add the decimal numbers with or without regrouping.

- 1. 231.25 + 322.00 + 423.50 =
- $2. \quad 568.50 + 47.75 + 889.75 =$
- 3. 5697.75 + 76983.75 + 798.50 = _____

Activity 2

Arrange and subtract the decimal number with or without renaming.

- 4. 689.75 325.25 =
- 5. Subtract 2715.35 from 7628.50



What's New

Read the problem.

Anna bought a cartolina worth ₱8.75 and colored papers at ₱24.50. How much did she pay for these items?

Answer the following questions:

- 1. Who bought the cartolina and colored papers?
- 2. Where do you think she will use these things?
- 3. If you buy something from the store, what do you ask for? _____
- 4. What do you call 8.75 and 24.50? _____
- 5. If you were Anna and you still have extra money, would you still buy other things beside the items bought? Why?



Solving routine or non-routine problems involving addition and subtraction of decimal numbers including money using appropriate problem solving strategies and tools

Problem 1

Mr. Baya and his wife dined in a restaurant .Their total bill was ₱471.82. He gave ₱500.00 to a waiter to their bill and told him to keep the change. How much tip did the waiter receive?

Study the solution below.

1. Understand.

a. Know what is asked. - tip of money receive by the waiter

b. Know the given facts. - ₱471.82, ₱500.00

2. Plan.

a. Determine the operation to be used. - Subtraction

b. Write the number sentence. - \$500.00 - \$471.82 = N

3. Solve.

a. Show your solution. - \$500.00 - \$471.82 = \$28.18

4. Check and look back.

a. Review and recheck your answer. You can use calculator to subtract ₱500.00 − ₱471.82



Solve the following problems:

1. Mr. Lagala bought a T-shirt for ₱250.00, a pair of denim pants for ₱530.75, and a pair of socks for ₱46.95. How much change did he get for his ₱1000.00 peso bill?

| Understand. What is asked? | |
|----------------------------|--|
| What are the given facts? | |
| | |

Plan.

| Determine the operation to be used. |
|---|
| |
| Write the number sentence. |
| Solve. |
| Show your solution. |
| |
| Check and look back. |
| Review and re check your answer |
| 2 . I bought 4 items worth ₱39.90, ₱68.60, ₱58.75 and ₱120.25. How much change |
| will I get from my ₱500-bill? |
| |
| Understand. |
| What is asked? |
| What are the given facts? |
| That are the given facts: |
| Plan. |
| Determine the operation to be used |
| White the mank and the |
| Write the number sentence. |
| Solve. |
| Show your solution. |
| |
| Check and look back. |
| Review and recheck your answer. |
| 3. William has P96.25 and Billy has P5.30. |
| How much money do they have together? |
| |
| Understand. What is asked? |
| What is asked? |
| What are the given facts? |
| |
| Plan. |
| Determine the operation to be used |
| Write the number sentence. |
| |
| Solve. |
| Show your solution |
| Check and look book |
| Check and look back. Review and recheck your answer |
| Review and recheck your answer. |

4. Roy starts with P90.00 and spends P32.35 on bananas. How much money was left?

| What is asked? |
|--|
| What are the given facts? |
| Plan. Determine the operation to be used |
| Write the number sentence. |
| Solve. Show your solution |
| Check and look back. Review and recheck your answer. |
| 5. After buying some pencils for P52.25, Kevin has P8.75 left. How much money does Kevin have at the beginning? |
| Understand. What is asked? |
| What are the given facts? |
| Plan. Determine the operation to be used |
| Write the number sentence. |
| Solve. Show your solution |
| Check and look back. Review and recheck your answer. |



What I Have Learned

How to solve routine or non-routine problems involving addition and subtraction of decimal numbers?

To solve routine and non-routine problems involving addition and subtraction of decimal numbers, just follow the 4-steps process.

- 1. Understand.
 - What is asked?
 - What are the given facts?
- 2. Plan.
- Determine the operation to be used.
- Write the number sentence.
- 3. Solve.

Show your solution.

4. Check and look back.

Review and recheck your answer.



What I Can Do

e. What is the answer?

Direction: Read the following word problems. Answer the questions that follow.

- 1. Rothel bought a kilogram of chicken for ₱153.25 and a bunch of bananas for ₱97.50. Find the total amount she paid?
 - a. What is asked in the problem? b. What are the given facts? c. What operation will you use? ______d. What is the mathematical sentence? _____
- 2. Jabbar bought ₱125.50 worth of fruits while Dina bought ₱215.00 worth of fruits. How much more fruit did Dina buy?
 - a. What is asked in the problem? _____ b. What are the given facts?

 - b. What are the given facts? ______ c. What operation will you use? _____ d. What is the mathematical sentence? ______
 - e. What is the answer? _____



Assessment:

Direction: Analyze the problems and encircle the letter of the correct answer.

Mr. Esmero bought a pair of leather slippers for ₱150.95 and a set of hankies for ₱29.75. How much change did he receive from his ₱500.00 peso bill?

- 1. What is asked in the problem?
 - a. The change of Mr. Esmero
 - b. The amount of a pair of leather slippers
 - c. The amount of a set of hankies
 - d. The total amount of all items he bought
- 2. What are the given facts?
 - a. ₱150.95, ₱29.75
- b. ₱29.75, ₱500.00
- c. ₱150.95, ₱29.75, ₱500.00
- d. ₱319.30
- 3. What is the total amount of all the items?
 - a. ₱290.80

b. ₱180.70

c. ₱98.90

- d. ₱319.30
- 4. What operations will be used?
 - a. Addition

- b. Subtraction
- c. Addition and subtraction
- d. Addition and multiplication

- 5. What is the answer?
 - a. ₱150.95

b. ₱29.75

c. ₱500.00

d. ₱319.30

Elbert bought a glass of buko juice for ₱10.00 and a banana cue for ₱7.50. How much was his change if he gave ₱50.00?

- 6. What is asked in the problem?

 - a. Elbert's change from his ₱50.00 b. total cost of buko juice and banana cue
 - c. amount of buko juice
- d. amount of money given by Elbert
- 7. What are the processes to be used to solve the problem?
 - a. addition and division
- b. addition and multiplication
- c. addition and subtraction
- d. subtraction and division
- 8. What is the hidden question?
 - a. How much money did he pay in all?
- b. How much change did he receive?
- c. How much does he have in his pocket? d. How much money did he save?
- 9. What is the mathematical sentence?

a.
$$50.00 \div (10.00 + 7.50) = n$$

b.
$$50.00 \times (10.00 + 7.50) = n$$

c.
$$50.00 - (10.00 + 7.50) = n$$

d.
$$50.00 + (10.00 + 7.50) = n$$

- 10. What is the answer?
 - a. ₱30.50
- b. ₱ 31.50
- c. ₱32.50
- d. ₱33.50



1. a 2.c 3.b 4.c 5.d 6.a 7.c 8.a 9.c 10.c

Assessment

d. $\mathbb{P}215.00 - \mathbb{P}125.50 = N$ e. $\mathbb{P}89.50$

2. a. How much more did Dina bought? b. \$125.50 and \$215.00 c. subtraction

1. a. total amount she paid b. $\P153.25$, $\P97.50$ c. addition d. $\P153.25 + \P97.50 = N$ e. $\P250.75$

What I Can Do

52.22€ = 27.8€ - 18€ .3

19€=27.8€ + 22.22€ .2

N = 27.84 + 22.284

a. Addition

2.25 and ₱8.75 £

The amount of Kim's money at the start

Problem 5:

$$06^{-1} = 22.26^{-1} + 27.72^{-1}$$
 6 $06^{-1} = 22.26^{-1} = 22.26^{-1}$ 6 $06^{-1} = 22.26^{-1}$

$$27.724 = 22.224 - 004.2$$
 $22.1014 = 05.24 + 22.304$.2

$$N = 22.254 - 994.4$$

1. The amount of money do they have altogether 1. The amount of money does koy have left

Problem 3: Problem 4:

08.2714 = 07.7284 - 00.000,14

$$02.2124 = 02.7824 - 00.0024$$
.
$$N = (29.04 + 27.0224 + 00.025) - 00.000, 14$$
.
$$2$$

N = (25.021 = 1)

$$+ 8.7.884 + 00.884 + 00.0084 + 00.0084$$

3. Addition and subtraction

I. Change he got of his 1,000.00 peso bill. I. Change I got from 500.00 peso bill.

Problem 1: Problem 2:

What's More

Addition and subtraction

 δ . No, because these are the only things I need

I. Anna 2. for school project 3. Receipt 4. the price of the two items

What's New

.ε

| | | 00.084.68 | 00.802.1 | SL'9L6 |
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What's In

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I AM A FILIPINO by Carlos P. Romulo

I am a Filipino – inheritor of a glorious past, hostage to the uncertain future. As such, I must prove equal to a two-fold task – the task of meeting my responsibility to the past, and the task of performing my obligation to the future.

I am sprung from a hardy race — child many generations removed of ancient Malayan pioneers. Across the centuries, the memory comes rushing back to me: of brown-skinned men putting out to sea in ships that were as frail as their hearts were stout. Over the sea I see them come, borne upon the billowing wave and the whistling wind, carried upon the mighty swell of hope — hope in the free abundance of the new land that was to be their home and their children's forever.

This is the land they sought and found. Every inch of shore that their eyes first set upon, every hill and mountain that beckoned to them with a green and purple invitation, every mile of rolling plain that their view encompassed, every river and lake that promised a plentiful living and the fruitfulness of commerce, is a hollowed spot to me.

By the strength of their hearts and hands, by every right of law, human and divine, this land and all the appurtenances thereof – the black and fertile soil, the seas and lakes and rivers teeming with fish, the forests with their inexhaustible wealth in wild and timber, the mountains with their bowels swollen with minerals – the whole of this rich and happy land has been for centuries without number, the land of my fathers. This land I received in trust from them, and in trust will pass it to my children, and so on until the world is no more.

I am a Filipino. In my blood runs the immortal seed of heroes – seed that flowered down the centuries in deeds of courage and defiance. In my veins yet pulses the same hot blood that sent Lapulapu to battle against the alien foe, that drove Diego Silang and Dagohoy into rebellion against the foreign oppressor.

That seed is immortal. It is the self-same seed that flowered in the heart of Jose Rizal that morning in Bagumbayan when a volley of shots put an end to all that was mortal of him and made his spirit deathless forever; the same that flowered in the hearts of Bonifacio in Balintawak, of Gregorio del Pilar at Tirad Pass, of Antonio Luna at Calumpit, that bloomed in flowers of frustration in the sad heart of Emilio Aguinaldo at Palanan, and yet burst forth royally again in the proud heart of Manuel L. Quezon when he stood at last on the threshold of ancient Malacanang Palace, in the symbolic act of possession and racial vindication. The seed I bear within me is an immortal seed.

It is the mark of my manhood, the symbol of my dignity as a human being. Like the seeds that were once buried in the tomb of Tutankhamen many thousands of years ago, it shall grow and flower and bear fruit again. It is the insigne of my race, and my generation is but a stage in the unending search of my people for freedom and happiness.

I am a Filipino, child of the marriage of the East and the West. The East, with its languor and mysticism, its passivity and endurance, was my mother, and my sire was the West that came thundering across the seas with the Cross and Sword and the Machine. I am of the East, an eager participant in its struggles for liberation from the imperialist yoke. But I know also that the East must awake from its centuried sleep, shake off the lethargy that has bound its limbs, and start moving where destiny awaits.

For I, too, am of the West, and the vigorous peoples of the West have destroyed forever the peace and quiet that once were ours. I can no longer live, a being apart from those whose world now trembles to the roar of bomb and cannon shot. For no man and no nation is an island, but a part of the main, and there is no longer any East and West – only individuals and nations making those momentous choices that are the hinges upon which history revolves. At the vanguard of progress in this part of the world I stand - a forlorn figure in the eyes of some, but not one defeated and lost. For through the thick, interlacing branches of habit and custom above me I have seen the light of the sun, and I know that it is good. I have seen the light of justice and equality and freedom, my heart has been lifted by the vision of democracy, and I shall not rest until my land and my people shall have been blessed by these, beyond the power of any man or nation to subvert or destroy.

I am a Filipino, and this is my inheritance. What pledge shall I give that I may prove worthy of my inheritance? I shall give the pledge that has come ringing down the corridors of the centuries, and it shall be compounded of the joyous cries of my Malayan forebears when first they saw the contours of this land loom before their eyes, of the battle cries that have resounded in every field of combat from Mactan to Tirad Pass, of the voices of my people when they sing:

"I am a Filipino born to freedom, and I shall not rest until freedom shall have been added unto my inheritance—for myself and my children and my children's children—forever."