

1

Lesson Exemplar for Mathematics

Quarter 4

Week

4

GOVERNMENT PROPERTY
NOT FOR SALE

Lesson Exemplar for Mathematics Grade 1

Quarter 4: Week 4

This material is intended exclusively for the use of teachers in the implementation of the MATATAG K to 10 Curriculum. It aims to assist in delivering the curriculum content, standards, and lesson competencies.

The Intellectual Property Code of the Philippines states that “No copyright shall subsist in any work of the Government of the Philippines. However, prior approval of the government agency or office wherein the work is created shall be necessary for exploitation of such work for profit. Such agency or office may, among other things, impose as a condition the payment of royalties.”

Borrowed materials (e.g., texts, illustrations, musical notations, photos, and other copyrightable, patentable contents) included in this learning resource are owned by their respective copyright and intellectual property right holders. Where applicable, DepEd has sought permission from these owners specifically for the development and printing of this learning resource. As such, using these materials in any form other than the agreed framework requires another permission and/or licensing.

No part of this material, including its original and borrowed contents, may be reproduced in any form without written permission from the Department of Education.

Every care has been taken to ensure the accuracy of the information provided in this material. For inquiries or feedback, please call the Office of the Director of the Bureau of Learning Resources via telephone numbers (02) 8634-1072 and 8631-6922 or send an email to blr.od@deped.gov.ph.

The Department of Education would like to extend its sincere appreciation and gratitude to the United States Agency for International Development and RTI International through its ABC+ Project and UNICEF for supporting and providing technical assistance in the development of the MATATAG learning resources.

Published by the Department of Education

Secretary: Sonny M. Angara

Undersecretary: Gina O. Gonong

Development Team

Writer:	UP NISMED (Edna G. Callanta)
Content Reviewer:	Melanie C. Unida and Richie Noveloso
Language Evaluators:	Gemma B. Espadero
Illustrator:	Rogelio Nozares
Layout Artist:	Lorraine Anne B. Ang

Management Team

Bureau of Curriculum Development, Bureau of Learning Delivery, Bureau of Learning Resources











MATATAG K to 10 Curriculum Weekly Lesson Log	School		Grade Level	1
	Name of Teacher		Learning Area	Mathematics
	Teaching Dates and Time	Week 4	Quarter	4

	DAY 1	DAY 2	DAY 3	DAY 4
I. CURRICULUM CONTENT, STANDARDS, AND LESSON COMPETENCIES				
A. Content: Numbers and Algebra				
B. Content Standards	<p>The learners should have knowledge and understanding of:</p> <ul style="list-style-type: none"> the denominations and values of Philippine coins and bills up to ₱100, and addition of money where the sum is up to ₱100 and subtraction of money where both amounts are less than ₱100. 			
C. Performance Standards	<p>By the end of the quarter, the learners are able to:</p> <ul style="list-style-type: none"> recognize, and determine the value of, Philippine coins and bills up to ₱100; and add money where the sum is up to ₱100 and subtract money where both amounts are less than ₱100. 			
D. Learning Competencies	<p>The learners</p> <ul style="list-style-type: none"> recognize coins (excluding centavo coins) and bills up to ₱100 and their notations; determine the value of a number of bills and/or a number of coins (excluding centavo coins) up to ₱100; compare different denominations of peso coins (excluding centavo coins) and bills up to ₱100; and solve 1-step problems (given orally or in pictures) involving addition of money where the sum is up to ₱100, or subtraction of money where both amounts are less than ₱100. 			
E. Learning Objectives	<p>At the end of the lesson, the learners should be able to:</p> <ul style="list-style-type: none"> determine the value of a number of bills and/or coins; express the amount of money in different ways; and write the amount of money using proper notation. 	<p>At the end of the lesson, the learners should be able to:</p> <ul style="list-style-type: none"> determine the value of a number of bills and/or coins; and write the amount of money using proper notation. 	<p>At the end of the lesson, the learners should be able to:</p> <ul style="list-style-type: none"> add amounts of money; and solve problems involving addition of amounts of money. 	<p>At the end of the lesson, the learners should be able to:</p> <ul style="list-style-type: none"> subtract amounts of money; and solve problems involving addition/subtraction of amounts of money.
II. TEACHING AND LEARNING PROCEDURES				
Activating Prior Knowledge	Discuss the answers to Assessment 2 from Day 4 of Week 3. If possible, post an enlarged	Discuss the answers to Assessment 1 from Day 1.	Have the learners bring out their show-me boards. Let them find	Refer to the display of toys used on Day 3.

copy of this assessment on the board.

Assessment 2

Write the number of coins and bills in exchange for the given. Number 1 has been done for you.

1. 	_____ 
2. 	_____ 
3. 	_____ 
4. 	_____ 
5. 	_____ 

Expected answers:

1. five 1-peso coins are needed in exchange for a 5-peso coin
2. four 5-peso coins are needed in exchange for a 20-peso coin
3. two 5-peso coins are needed in exchange for a 10-peso coin
4. ten 5-peso coins are needed in exchange for 50-peso bill
5. five 20-peso coins are needed in exchange for 100-peso bill

Lead the discussion on why some groups of coins and bills can or cannot be exchanged.

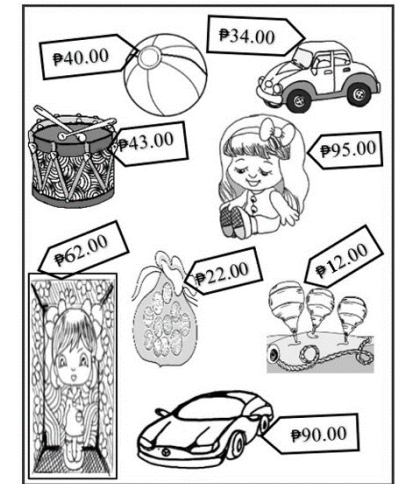
Learners should be able to explain that those groups of coins and bills can be exchanged because they have the same total values, while those that cannot be exchanged have different values. This allows learners to determine and compare the values of each pair of groups of coins and bills.

the sum or difference of the following numbers.

1. $32 + 21$
2. $45 + 13$
3. $22 + 33$
4. $56 - 24$
5. $73 - 51$

Expected answers:

1. 53
2. 58
3. 55
4. 32
5. 22




Ask the following questions:



Can you buy the drum and the plastic doll for ₱100.00? *No, we cannot buy the drum and the plastic doll with ₱100.00. The total cost of the drum and the plastic doll is greater than ₱100.00.*

How did you know that the cost of the drum and the plastic doll is greater than ₱100.00? *We added the price of the drum and the price of the plastic doll and then compared the total to ₱100.00.*

$$\begin{array}{r} \text{₱ } 43.00 \\ + \text{ ₱ } 62.00 \\ \hline \text{₱ } 105.00 \end{array}$$





How much more money do you still need to be able to buy the drum and the plastic doll? *We still need ₱5.00 to be able to buy the drum and the plastic doll.*

Lesson Purpose/ Intention	To determine the value of a number of bills and/or coins, express the amount of money in different ways, and write the amount of money using proper notation	To determine the value of a number of bills and/or coins and write the amount of money using proper notation.	To add and solve problems involving amounts of money	To subtract and solve problems involving amounts of money
Lesson Language Practice	1-peso coin, 5-peso coin, 10-peso coin, 20-peso coin, 20-peso bill, 50-peso bill, 100-peso bill, coins, bills, equivalent, amount, value, money, combine, point/dot, peso sign or symbol	1-peso coin, 5-peso coin, 10-peso coin, 20-peso coin, 20-peso bill, 50-peso bill, 100-peso bill, coins, bills, equivalent, amount, value, money, combine, point/dot, peso sign or symbol	Price, total amount, coins, bills, addition, point/dot, digits, sum add, plus, equals, digits, addends, peso sign or symbol	Price, total amount, coins, bills, subtract, difference, point/dot, digits, equals, digits
Reading the Key Idea/Stem				
Developing Understanding of Key Idea/Stem	<p>After answering all the items in the assessment mentioned above, ask the following questions:</p> <p>What is the value of the 5-peso coin? <i>The value of the 5-peso coin is 5 pesos.</i></p> <p>How many 1-peso coins can be exchanged for the 5-peso coin? <i>We need five 1-peso coins in exchange for one 5-peso coin.</i></p> <p>Is this the only way that we can exchange the 5-peso coin? Yes, <i>if we exchange it for 1-peso coins.</i></p> <p>Some learners who are aware of centavo coins may give this response: <i>No, the 5-peso coin can also be exchanged for centavo coins, particularly 25-centavo coins.</i></p>	<p>After the learners have explained their answers to Assessment 1, ask the following questions:</p> <p>How did you determine the value of the groups of coins and bills? <i>We used skip counting to tell the total value of the set of bills and/or coins.</i></p> <p>Note: Learners may have used different ways of performing the tasks, so be open to various responses.</p> <p>How did you do it? (Call on learners to demonstrate how counting was done.)</p> <p>Post the situation below.</p>	<p>Pose the problem below.</p> <p>A store has these toys displayed.</p> 	<p>How did you know that you still need ₱5.00? <i>We compared the total cost of the two toys, which is ₱105.00, with ₱100.00. Since ₱105.00 is ₱5.00 more than ₱100.00, we still need ₱5.00.</i></p> <p>How else can we find the amount you still need? <i>We can subtract ₱100.00 from ₱105.00.</i></p> <p>How do we do that? Let the learners get their show-me boards and show how the difference may be obtained. Ask some learners to share their answers.</p> <p>Show how subtraction involving money is done.</p>

	<p>Give affirmation that 5-peso coins can be exchanged for centavo coins particularly, 25-centavo coins. The exact number of 25-centavo coins needed for this exchange will be discussed in the next lesson.</p> <p>What is the value of five 1-peso coins? <i>The value of five 1-peso coins is 5 pesos.</i></p> <p>Write ₱5.00 on the board next to the five 1-peso coins.</p> <p>Explain that the 5-peso coin and five 1-peso coins have the same value.</p> <p>What is the value of the 20-peso coin? <i>The value of the 20-peso coin is 20 pesos.</i></p> <p>How many 5-peso coins can be exchanged for the 20-peso coin? <i>Four 5-peso coins can be exchanged for the 20-peso coin.</i></p> <p>What is the value of four 5-peso coins? <i>The value of the four 5-peso coins is 20 pesos.</i></p> <p>Is this the only way that we can exchange the 20-peso coin? <i>No, a 20-peso coin can also be exchanged for twenty 1-peso coins or for two 10-peso coins.</i></p>	<p>Karen has these coins.</p>  <p>Pam has these coins and bills.</p>  <p>Pam said that she has more money than Karen. Do you agree with Pam? Explain your answer.</p> <p>Explain the task to the learners. Make sure that they understand it before distributing LAS 1. Let the learners work in pairs. Allow them to use bills and coins if they opt to.</p>	<p>Karen wants to buy two toys with her ₱100.00. Which two toys can she buy? Explain your answer.</p> <p>Let the learners name the toys displayed (ball, red car, drum, marbles, rug doll, plastic doll, trumpo (top), and yellow car) and the price of each toy. Explain the task to the learners. You may ask questions for them to understand the task. Also, allow them to use coins and bills to do the task.</p> <p>Distribute LAS 3. Let the learners do the activity in pairs and then discuss their answers afterward.</p> <p>Learners may give just the names of the toys they selected and the total cost, without showing the computation.</p> <p><i>Some possible pairs of toys which can be bought for ₱100.</i></p> <table><tr><td>ball and red car</td><td><div>₱40.00</div><div>+ ₱34.00</div><div>₱74.00</div></td></tr><tr><td>ball and drum</td><td><div>₱40.00</div><div>+ ₱43.00</div><div>₱83.00</div></td></tr><tr><td>ball and marbles</td><td><div>₱40.00</div><div>+ ₱22.00</div><div>₱62.00</div></td></tr></table>	ball and red car	<div>₱40.00</div> <div>+ ₱34.00</div> <div>₱74.00</div>	ball and drum	<div>₱40.00</div> <div>+ ₱43.00</div> <div>₱83.00</div>	ball and marbles	<div>₱40.00</div> <div>+ ₱22.00</div> <div>₱62.00</div>	<p>Give another example. Let them find the difference in the price of the rug doll and the plastic doll. Let them use their show-me board to write their answers.</p> <p>How do you subtract amounts of money in vertical form? <i>We write the digits of the numbers in columns, including the point and the two zeros after the point. We also put the peso sign. Then, we subtract as if we are subtracting (whole) numbers.</i></p>
ball and red car	<div>₱40.00</div> <div>+ ₱34.00</div> <div>₱74.00</div>									
ball and drum	<div>₱40.00</div> <div>+ ₱43.00</div> <div>₱83.00</div>									
ball and marbles	<div>₱40.00</div> <div>+ ₱22.00</div> <div>₱62.00</div>									

	<p>What is the value of twenty 1-peso coins? <i>The value of twenty 1-peso coins is 20 pesos.</i></p> <p>What is the value of two 10-peso coins? <i>The value of two 10-peso coins is 20 pesos.</i></p> <p>Write ₱20.00 on the board next to the coins.</p> <p>Explain that the 20-peso coin, four 5-peso coins, twenty 1-peso coins, and two 10-peso coins all have the same value, which is twenty pesos.</p> <p>How many 5-peso coins can be exchanged for the 10-peso coin? <i>Two 5-peso coins can be exchanged for the 10-peso coin.</i></p> <p>How else can we exchange the 10-peso coin? <i>We can also exchange the 10-peso coin for ten 1-peso coins.</i></p> <p>What can you say about the values of the 10-peso coin, two 5-peso coins, and ten 1-peso coins? <i>They all have the same value, which is 10 pesos.</i></p> <p>Write ₱10.00 on the board next to the coins.</p> <p>What can you say about exchanging coins?</p>		<div><div><div>drum and red car</div><div><div>₱43.00</div><div>+ ₱34.00</div><div>₱77.00</div></div></div><div><div>trumpo (top) and plastic doll</div><div><div>₱12.00</div><div>+ ₱62.00</div><div>₱74.00</div></div></div></div> <p><i>Other pairs of toys are possible, as long as the total cost is less than or equal to ₱100.00.</i></p> <p><i>Some possible explanations:</i></p> <ul style="list-style-type: none">• <i>Adding the amounts of the toys and comparing the total amount to ₱100.00.</i>• <i>Using coins and bills for each amount of toy, combine the coins and bills, count the total amount, and then compare it with ₱100.00.</i> <p><i>Note: This explanation can be presented with drawings.</i></p> <ul style="list-style-type: none">• <i>Representing one of the prices with coins and bills. Adding to this amount the second toy’s price by skip counting, and then comparing the total amount obtained to ₱100.00.</i> <p>The yellow car and the rug doll cannot be paired with any other toys because adding the price of any other toy to its price would give a total amount greater than</p>	
--	---	--	--	--

	<ul style="list-style-type: none"> • <i>There is more than one way to exchange a coin for smaller-valued coins.</i> • <i>Different sets of coins can be exchanged for the same total amount or value.</i> • <i>Different combinations of coins can have the same value or amount.</i> <p>How do we write the value or the amount of money? <i>We write the value of money by using the symbol ₱ followed by the number. After the number, we put a dot/point and two zeros.</i></p>		₱100.00. Therefore, Karen should not buy either of these toys.	
Deepening Understanding of Key Idea/Stem	<p>Referring to the last two items of Assessment 2 mentioned above (Activating Prior Knowledge Part), ask the following questions:</p> <p>What is the value of the 50-peso bill? <i>The value of the 50-peso bill is fifty pesos.</i></p> <p>Explain that in symbol, 50 pesos is written as ₱50.00. Write ₱50.00 on the board.</p> <p>What is the value of the 100-peso bill? <i>The value of the 100-peso bill is one hundred pesos.</i></p> <p>Explain that in symbol, 100 pesos is written as ₱100.00. Write ₱100.00 on the board.</p>	<p>After the learners have answered the task, discuss their answers. Focus on the strategies they used and their explanations.</p> <p>Possible solutions: <u>Solution 1:</u> <i>Karen's money is ₱90.00. Pam's money is ₱85.00. We don't agree with Pam. Karen has more money. ₱90.00 is more than ₱85.00.</i></p> <p><u>Solution 2:</u> <i>Using coins and bills or the drawing to match amounts of coins and bills.</i></p>	<p>After the learners have finished the activity, ask some of them to share their answers with the class. Write the unique answers on the board.</p> <p>The discussion should focus on:</p> <ul style="list-style-type: none"> • the pair of toys that Karen can buy with her money; • the price of the two toys; • how they determined the total price of the toys; and • why Karen could buy those two toys. <p>Tell the learners that they can use addition to find the total price of the two toys.</p>	<p>Have the learners find the difference in the price of each pair of toys.</p> <ol style="list-style-type: none"> 1. yellow car and ball 2. drum and marbles 3. red car and trumpon (top) <p>Show each pair of toys one at a time. Let the learners write their answers on their show-me boards. Give additional pairs when necessary.</p> <p>Check learners' answers after each pair of toys is shown.</p> <p>After all the questions have been answered, ask learners how subtraction involving money is</p>

<p>Let the learners work in groups. Give the following instructions.</p> <p>Think of different ways to exchange the bills below for smaller-valued coins and bills. You may use your coins and bills to help you, and combine them however you want.</p> <p>a. </p> <p>b. </p> <p>After the activity, discuss the answers of the learners. Let them justify their answers.</p> <p><i>Some possible answers for the 50-peso bill aside from ten 5-peso coins:</i></p> <ul style="list-style-type: none"> • fifty 1-peso coins • five 10-peso coins • two 20-peso coins/bills and one 10-peso coin • two 20-peso coins/bills and ten 1-peso coins • four 10-peso coins and two 5-peso coins <p>Accept different answers from the learners as long as the total value of the group of coins and/or bills amounts to 50 pesos.</p>	<p><i>Karen</i></p>  <p><i>Pam</i></p>  <p><i>Pam is incorrect. Karen has more money because she has an extra 5-peso coin.</i></p> <p><u>Solution 3:</u> <i>Exchanging the 50-peso bill for two 20-peso coins and one 10-peso coin, then match the amounts of coins and bills.</i></p>	<p>Let the learners add 34 and 52. Let them explain how they added the two numbers. They should be able to say that when writing the addends in vertical form, the digits in each place value must be aligned. The sum is obtained by adding the numbers in each column, starting from the ones place and then moving to the left.</p> <p>Let them look at the price of the red toy car (₱34.00) and the doll (₱52.00).</p> <p>Tell them that when adding the prices, the digits in each place value must be aligned, just like in addition of whole numbers. The peso sign, the point, and the two zeros after the point must also be aligned.</p> $\begin{array}{r} \text{₱}34.00 \\ + \text{₱}62.00 \\ \hline \text{₱}96.00 \end{array}$ <p>The total price of the red car and the doll is ₱96.00.</p> <p>Give one more example, like finding the total price of the ball and the trumpo (top).</p> $\begin{array}{r} \text{₱}40.00 \\ + \text{₱}12.00 \\ \hline \text{₱}52.00 \end{array}$	<p>done. They should be able to say that subtracting money is just like subtracting whole numbers. The digits of the numbers should be aligned correctly. When writing the difference, include the peso sign (₱), the point, and the two zeros after the point.</p> <p>Post the problem. Use the same set of toys for this problem.</p> <p>Mel had ₱85.00. After buying a toy, ₱63.00 is left of his money. What toy did he buy?</p> <p>Ask the learners questions to make them understand the problem. Let each pair of learners answer the question.</p> <p>When all pairs are done, call on those with unique solutions to share them with the class.</p> <p><i>Possible solutions:</i></p> <p><u>Solution 1</u> <i>Subtracting the amount left from the initial money to find amount of the toy bought.</i></p> $\begin{array}{r} \text{₱}85.00 \\ - \text{₱}63.00 \\ \hline \text{₱}22.00 \end{array}$ <p><i>The toy which cost ₱22.00 is the pack of marbles. Mel bought the marbles.</i></p>
---	--	---	--

	<p>Ask the learners about the values of the sets of coins and bills they used to make 50 pesos. Lead them to realize that all the different groups have the same value, that is fifty pesos. Each group can be exchanged for a 50-peso bill, which is written in symbols as ₱50.00.</p> <p><i>Some possible answers for the 100-peso bill aside from five 20-peso coins:</i></p> <ul style="list-style-type: none"> • two 50-peso bills • ten 10-peso coins • twenty 5-peso coins • one hundred 1-peso coins • four 20-peso coins/bills and two 10-peso coin • nine 10-peso coins and ten 1-peso coins • one 50-peso bill, two 20-peso bills, and one 10-peso coin <p>Accept different answers from the learners as long as the total value of the group of coins and/or bills is 100 pesos.</p> <p>Ask the learners about the values of the groups of coins and bills they used to make 100-pesos. Lead them to realize that all the different groups have the same value, that is one hundred pesos. Each group can be exchanged for</p>	<div data-bbox="831 135 1232 901"> <div> <div>Karen</div> <div>Pam</div> </div> <p><i>No, Karen has more money than Pam. She has an extra 5-peso coin.</i></p> <p>After all the solutions have been presented and explained, go back to Solution 1. Ask the learners how they determined the amount of money Karen and Pam have and how these amounts were written in symbols. They should be able to say that the values of the coins and bills were counted. In writing the amounts, the ₱ and point were used.</p> </div>	<p>The total price of the ball and the trumpo (top) is ₱52.00.</p> <p>Let the learners find the total amount of two or three more pairs of toys using addition.</p> <p>Ask the learners to explain how they added the prices. They should be able to say that the digits of the addends and the sum must be aligned properly, including the point and the two zeros after it. Also, the symbol ₱ must be included when writing the amounts.</p> <p>Have them answer LAS 4 in pairs.</p> <p><i>Expected answers:</i></p> <p>A.</p> <ol style="list-style-type: none"> 1. <i>Done</i> 2. <i>₱75.00</i> 3. <i>₱46.00</i> 4. <i>₱65.00</i> 5. <i>₱77.00</i> <p>B.</p> <ol style="list-style-type: none"> 1. <i>₱68.00</i> 2. <i>₱78.00</i> 3. <i>₱56.00</i> 4. <i>₱85.00</i> 	<p><u><i>Solution 2</i></u> <i>Adding the cost of the toy that could give the initial money (trial and error).</i></p> $\begin{array}{r} \text{₱}22.00 \\ + \text{₱}63.00 \\ \hline \text{₱}85.00 \end{array}$ <p><i>Mel bought the marbles.</i></p>
--	---	--	--	---

100 pesos, which is written in symbols as ₱100.00.

You may let the learners demonstrate how counting is done. It may be:

For Karen:

20, 40, 60, 70, 80, 85, 90

Total: ₱90.00



For Pam:

50, 70, 75, 80, 81, 82, 83, 84, 85

Total: ₱85.00



Let the learners answer **LAS 2** in pairs. They may be allowed to use bills and coins in answering the worksheet.

Expected answers:

1. Done
2. ₱60.00
3. ₱74.00
4. ₱65.00
5. ₱56.00
6. ₱92.00

Making Generalizations	<p>How do you exchange a bigger-valued coin or bill for a combination of smaller-valued coins/bills? <i>Combine and count the coins and/or bills until you get the same value or amount.</i></p> <p>What symbol do you use to write amounts in pesos? (Let the learners write the symbol in the air and ask one or two learners to write it on the board).</p>	<p>How do you determine the total amount of a group of coins and bills? <i>We count them, the coins and bills, by their value starting with the coin/bill with the largest value and then proceeding to the smaller ones.</i></p> <p>How do you write the amounts? <i>We use the peso sign (₱) and the number, followed by a point, and two zeros after the point. (e.g., ₱90.00).</i></p>	<p>How do you add amounts of money? <i>Write the amounts in vertical form, making sure the digits, including the point and the two zeros, are aligned correctly. Add the amounts just like whole numbers. Include the peso symbol ₱ before the amount. After adding, copy the sign ₱, the point, and the two zeros after the point to show the total.</i></p>	<p>How do you subtract amounts of money? <i>Just like subtracting whole numbers, write the amounts in vertical form. The digits of these amounts, including the point and the two zeros, must be aligned correctly. The symbol ₱ must also be written.</i></p>
Evaluating Learning	<p>Let the learners answer Assessment 1 individually.</p> <p><i>Expected answers:</i></p> <ol style="list-style-type: none"> 1. Done 2. No 3. Yes 4. Yes 5. No 6. Yes 		<p>Let the learners answer Assessment 2 individually.</p> <p><i>Expected answers:</i></p> <ol style="list-style-type: none"> 1. Karlo's total amount of money is ₱87.00. 2. Mel spent ₱97.00 in all. 	<p>Let the learners answer Assessment 3 individually.</p> <p><i>Expected answers:</i></p> <p>A.</p> <ol style="list-style-type: none"> 1. ₱43.00 2. ₱22.00 3. ₱31.00 4. ₱17.00 <p>B.</p> <ol style="list-style-type: none"> 1. ₱13.00 was left with Ken after buying snacks. 2. Pam has more money left. <p><i>Possible explanations:</i></p> <p><i>The cost of Pam's pair of shorts is cheaper than Nat's.</i></p> <p><i>After subtracting the cost of each pair of shorts from their initial amounts, Nat's change from his ₱75.00 is ₱21.00, while Pam's change is ₱30.00.</i></p>

Additional Activities for Application or Remediation (if applicable)				
III. LEARNING RESOURCES				
A. References				
1. Teacher's Guide				
2. Learner's Materials				
3. Textbook				
4. Additional Materials from Learning Resource (LR) Portal				
B. Other Learning Resources				
IV. TEACHER REFLECTION				