

Mathematics

Quarter 1 – Module 15(a): Subtracting Mentally 1 to 2-Digit Numbers



Mathematics – Grade 3

Alternative Delivery Mode

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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 need to 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. And 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

This module was designed and written with you in mind. It is here to help you subtract mentally 1 to 2-digit numbers without or with regrouping. 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. Subtract mentally 1 to 2-digit numbers without and with regrouping using appropriate strategies.

Enjoy your journey. Good luck!



What I Know

Subtract the following numbers mentally without using pen and paper.

$$\begin{array}{r} 1. \quad 58 \\ - \quad 24 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 56 \\ - \quad 19 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 65 \\ - \quad 43 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 21 \\ - \quad 8 \\ \hline \end{array}$$

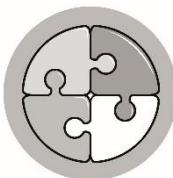
$$\begin{array}{r} 3. \quad 49 \\ - \quad 18 \\ \hline \end{array}$$

Lesson

Subtracts Mentally 1 to 2-Digit Numbers Without or With Regrouping

In our day-to-day activities, we encounter situations that involve subtraction of numbers including money. There are real-life situations where we need to do mathematical operations without using pens and paper.

In this lesson, we will be subtracting numbers without the aid of pen and paper. We will be doing it mentally.



What's In

A. Directions: Round off the following numbers to the nearest tens.

1. $42 - \underline{\hspace{2cm}}$ 4. $59 - \underline{\hspace{2cm}}$

2. $25 - \underline{\hspace{2cm}}$ 5. $18 - \underline{\hspace{2cm}}$

3. $36 - \underline{\hspace{2cm}}$

B. Directions: Perform the following operations:

1. $\begin{array}{r} 18 \\ - 6 \\ \hline \end{array}$

2. $\begin{array}{r} 10 \\ - 9 \\ \hline \end{array}$

3. $\begin{array}{r} 17 \\ - 3 \\ \hline \end{array}$

4. $\begin{array}{r} 13 \\ - 6 \\ \hline \end{array}$

5. $\begin{array}{r} 22 \\ - 5 \\ \hline \end{array}$



Notes to the Teacher

Assist the learner during the review. Help him/her recall rules and concept in rounding numbers to the nearest tens, simple addition, and subtraction.



What's New

Activity 1

Rizzi and Tony harvested tomatoes in their backyard garden. Rizzi harvested 35 green tomatoes and 17 orange tomatoes, while Tony reaped 13 green tomatoes and 9 orange tomatoes.

Question 1: What is the difference between the harvested green tomatoes of Rizzi and Tony?



What is It

We can subtract mentally and even start with the highest value if there is no regrouping to be done.

Example: $\begin{array}{r} 35 \\ - 13 \\ \hline \end{array}$ – green tomatoes that Rizzi harvested
 $\begin{array}{r} 13 \\ \hline \end{array}$ – green tomatoes that Renzyl reaped

Can you subtract 3 from 5? What about 1 from 3?

Check if there is no regrouping, then you can subtract the number right away.

So, $\begin{array}{r} 35 \\ - 13 \\ \hline \end{array}$

22 – the difference between the harvested green tomatoes of Rizzi and Renzyl

Question 2: What is the difference between the harvested red tomatoes of the two children?

Look: $\begin{array}{r} 17 \\ - 9 \\ \hline \end{array}$ – orange tomatoes that Rizzi harvested
 $\begin{array}{r} 9 \\ \hline \end{array}$ – orange tomatoes that Renzyl reaped

Can we subtract 9 from 7? The answer is no. We need to regroup, so we have to **use the compensation strategy**.

$\begin{array}{r} 17 \\ - 9 \\ \hline \end{array}$ Look at your subtrahend. What will you add to make it a multiple of 10 or to make 10?

Change 9 to 10.

Think: $9 + 1 = 10$; 10 is easier to use than 9.

$\begin{array}{r} 17 \\ - 10 \\ \hline \end{array}$ Subtract: $17 - 10$

The answer is 7.

$\begin{array}{r} 7 \\ \hline \end{array}$ Add 1 to compensate for subtracting the extra 1.

$$\begin{array}{r} + 1 \\ \hline \end{array}$$

8 - the difference between the harvested red tomatoes of the two girls

What if we add 1 both subtrahend and minuend? Will we have the same answer?

$$\begin{array}{r} 17 \\ - 9 \\ \hline \end{array}$$
 How can we make the subtrahend a multiple of 10?
(Add 1 to it.) So, $9 + 1 = 10$

$$\begin{array}{r} 17 \\ - 9 \\ \hline \end{array}$$
 What you did in the subtrahend, you also do in the minuend.
So, $17 + 1 = 18$

$$\begin{array}{r} 18 \\ - 10 \\ \hline 8 \end{array}$$
 Subtract the numbers.
Did we get the same difference?

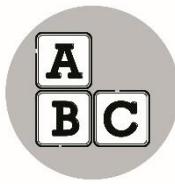
Let's try another subtraction problem.

a. Using the compensation strategy, we add 2 to both minuend and subtrahend.

$$\begin{array}{r} 52 \\ - 8 \\ \hline 44 \end{array} \quad \begin{array}{r} 52 + 2 = 54 \\ 8 + 2 = 10 \\ \hline 44 \end{array}$$

b. Using the same strategy, we add 3 to both minuend and subtrahend.

$$\begin{array}{r} 34 \\ - 17 \\ \hline 17 \end{array} \quad \begin{array}{r} 34 + 3 = 37 \\ 17 + 3 = 20 \\ \hline 17 \end{array}$$



What's More

Activity 2

Subtract the following numbers mentally without using pen and paper.

$$1.) \begin{array}{r} 36 \\ - 6 \\ \hline \end{array}$$

$$2.) \begin{array}{r} 49 \\ - 8 \\ \hline \end{array}$$

$$3.) \begin{array}{r} 68 \\ - 21 \\ \hline \end{array}$$

$$4.) \begin{array}{r} 83 \\ - 46 \\ \hline \end{array}$$

$$5.) \begin{array}{r} 52 \\ - 18 \\ \hline \end{array}$$

Activity 3

Arrange the following numbers in a column. Subtract mentally.

$$1.) 49 - 25 = \underline{\hspace{2cm}}$$

$$4.) 76 - 29 = \underline{\hspace{2cm}}$$

$$2.) 54 - 18 = \underline{\hspace{2cm}}$$

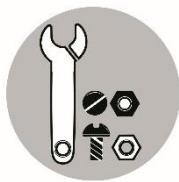
$$5.) 38 - 19 = \underline{\hspace{2cm}}$$

$$3.) 68 - 54 = \underline{\hspace{2cm}}$$



What I Have Learned

1. We can directly subtract mentally and even start with the highest value if there is no regrouping to be done.
2. We can use the compensation method in subtracting mentally the numbers that need to be regrouped.



What I Can Do

Activity 4

Read the problem below. Then without using pen and paper, solve the problem by mentally subtracting the given numbers.

1. Mother bought 52 eggs to be used in baking a cake for RJ's birthday. If she fried 8 eggs for breakfast, how many eggs were left?
2. Rey gathered 38 seashells while the family is having a picnic on the beach. He gave 15 shells to her daughter. How many shells were left?



Assessment

Without using pen and paper, subtract mentally the numbers below.

$$\begin{array}{r} 64 \\ - 28 \\ \hline \end{array}$$

$$\begin{array}{r} 35 \\ - 17 \\ \hline \end{array}$$

$$\begin{array}{r} 78 \\ - 48 \\ \hline \end{array}$$

$$\begin{array}{r} 55 \\ - 28 \\ \hline \end{array}$$

$$\begin{array}{r} 69 \\ - 32 \\ \hline \end{array}$$



Additional Activities

Activity 5

Table of fruits harvested in a farm.

Fruits	Variety	No. of Fruits	Total	
Mango	Apple Mango	38	81	
	Carabao Mango			
Banana	Lakatan	43		
	Latundan			

Solve the problems below mentally without using pen and paper.

1. How many Apple Mangos are there if there are 23 Carabao Mangos?
2. How many Latundan are there if there are 18 Lakatan bananas?
3. How many fruits are left when 23 Carabao Mangos were sold?
4. How many fruits are left when 18 Lakatan were sold?



Answer Key

What I Know	Assessment	Activity 1	Activity 2	Activity 3	Activity 4	Additional Activities	What's In	A.	B.	1. 12	2. 1	3. 14	4. 7	5. 17	
1. 34	1. 22	1. 28	1. 30	1. 24	5. 34	1. 15	1. 40	2. 30	3. 40	4. 60	5. 20	6. 25	7. 58	8. 63	9. 66
2. 22	2. 18	2. 8	2. 41	3. 47	4. 37	2. 36	9. 12	10. 19	11. 24	12. 36	13. 58	14. 47	15. 19	16. 44	17. 23
3. 31	3. 30	3. 47	3. 47	4. 47	5. 19	3. 14	18. 12	19. 12	20. 12	21. 12	22. 1	23. 14	24. 7	25. 17	26. 17
4. 37	4. 27	4. 30	4. 37	5. 19	5. 19	4. 47	24. 12	25. 12	26. 12	27. 1	28. 1	29. 14	30. 7	31. 17	32. 17
5. 13	5. 37	5. 30	5. 37	5. 34	5. 34	5. 34	31. 12	32. 12	33. 12	34. 1	35. 1	36. 14	37. 7	38. 17	39. 17

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