

Mathematics

Quarter 2 – Module 8:

Multiples of 1- to 2- Digit Numbers



Mathematics – Grade 3
Alternative Delivery Mode
Quarter 2 – Module 8: Multiples of 1- to 2- Digit Numbers
First Edition, 2020

Republic Act 8293, section 176 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 (i.e., songs, stories, poems, pictures, photos, brand names, trademarks, etc.) included in this module are owned by their respective copyright holders. Every effort has been exerted to locate and seek permission to use these materials from their respective copyright owners. The publisher and authors do not represent nor claim ownership over them.

Published by the Department of Education
Secretary: Leonor Magtolis Briones
Undersecretary: Diosdado M. San Antonio

Development Team of the Module

Author: John Expe D. Satinitigan

Editors: Arnel S. Zaragosa, Jeremias C. Ceniza, Gina F. Silvestre, Ph.D., Elma C. Prudente, Annie Fel Lingatong

Reviewers: Edgardo Dondon S. Lorenzo, Ailyn V. Ponce, Emily A Paller, Eduardo Eroy

Illustrators: Dennis Macaubos, Alfie Valenteros, Christian Loyd Alfuerio, Pit Ybanez

Layout Artist: Teodorico A. Cabildo Jr.

Management Team: Evelyn R. Fetalvero

Alona C. Uy

Janette G. Veloso

Maria Gina F. Flores

Analiza C. Almazan

Arnel S. Zaragosa

Ma. Cielo D. Estrada

Jeremias C. Ceniza

Renato N. Pacpakin

Illuminado T. Boiser

Printed in the Philippines by _____

Department of Education – Region XI

Office Address: F. Torres St., Davao City

Telefax: (082) 291-1665; (082) 221-6147

E-mail Address: region11@deped.gov.ph * lrms.regionxi@deped.gov.ph

Mathematics

Quarter 2 – Module 8: Multiples of 1- to 2- Digit Numbers

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 master on describing one's drawing about the narratives listened to through composition. 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 Grade 3 Mathematics learning materials you are using.

After going through this module, you are expected to:

- visualize and state the multiples of 1 to 2-digit numbers

Enjoy your journey. Good luck!



What I Know

1. Write the first 4 multiples of the given number.

a. 25 _____ , _____ , _____ , _____

b. 8 _____ , _____ , _____ , _____

c. 12 _____ , _____ , _____ , _____

d. 95 _____ , _____ , _____ , _____

e. 9 _____ , _____ , _____ , _____

2. Visualize the first 3 multiples of the given number using sticks.

a. Multiples of 2

b. Multiples of 5

c. Multiples of 10

Lesson

Visualizes and States the Multiples of 1 to 2-Digit Numbers

In this module, we will discuss about multiples of 1- to 2-digit numbers. A *multiple* is a number you say when you "count by" a number, or use skip-counting.



What's In

Before going further, let us try to review your previous learning.

Complete the next 5 sequence of the following number using skip counting.

1. 5 –
2. 12 –
3. 7 –
4. 8 –
5. 10 –



What's New

Observe the following numbers.

What are the next numbers?

- a. 2, 4, 6, 8, __, __, __
- b. 3, 6, 9, 12, __, __, __
- c. 10, 20, 30, __, __, __
- d. 12, 24, 36, 48, __, __, __
- e. 7, 14, 21, 28, __, __, __



What is It

To get the next number in the sequence in our previous activity, simply get the common difference in the sequence then add the difference to the last number of the sequence and so on.

Example. Complete the sequence:

$$2, 4, \textcircled{6}, \textcircled{8}, _, _, _$$

(subtract)

$$8 - 6 = \textcircled{2} \rightarrow \text{common difference}$$

Adding 2 to the last number: 2, 4, 6, 8, 10, 12, 14

The **first number of the sequence is 2** and its **common difference is 2**. This is an example of a sequence of **multiples of 2**.

To get the multiples of 2, start at 2 then add 2 to every number in the sequence.

To help you understand multiples better, here is a visualization you can picture in your head when you are asked to find the multiples of a number.

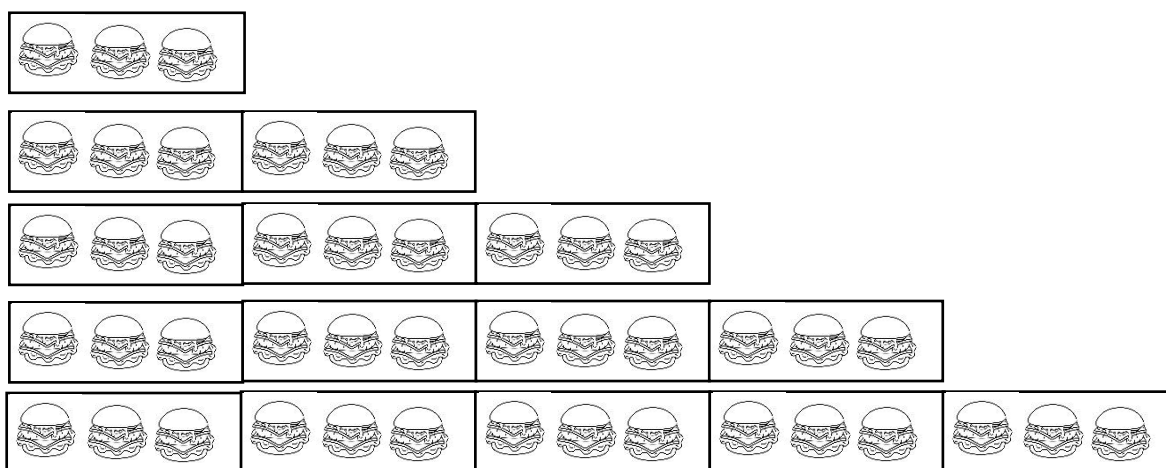
First, picture a group of something. This group of something will represent our whole number. Say we are using the number 3. We can picture 3 yummy cheeseburgers.

Now, to find the multiples of our number 3, we will begin by counting our first group. We have 3. This is our first multiple. To find our next number, we create an exact copy of our first group. Now we have two groups of 3 cheeseburgers. How many total cheeseburgers do we have now? We have 6 yummy cheeseburgers. So 6 is our next multiple.

To find our next multiple, we again make another exact copy of our group of 3 yummy cheeseburgers. How many cheeseburgers do we have now? We have 9 yummy cheeseburgers. So 9 is our next multiple of 3. Writing our list, we have 3, 6, 9, etc. We can keep going by making more copies of our original group and then adding up the total number of items to find even more multiples.

Example: Visualize multiples of 3.

Solution:



... so on and so forth.

However, if we are to involve large number like finding the multiples of a 2-digit number, it would be difficult to visualize.

In this case, we have another way in finding the multiples of a number, that is to multiply the number by 1, 2, 3, 4 and so on to determine the next multiple of the number.

Example: State the multiples of 3.

Solution:

$$3 \times 1 = \mathbf{3}$$

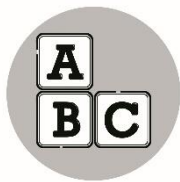
$$3 \times 2 = \mathbf{6}$$

$$3 \times 3 = \mathbf{9}$$

$$3 \times 4 = \mathbf{12}$$

$$3 \times 5 = \mathbf{15} \text{ so on and so forth.}$$

Answer: 3, 6, 9, 12, 15, ...



What's More

Visualize the first three multiples of the given number using sticks.

1. 4

--	--	--

2. 11

--	--	--

3. 25

--	--	--



What I Have Learned

How to visualize the multiples of a number?

1. Picture out a group of something. This group of something will represent our whole number. The given number will be our **first multiple**.
2. To find our next number, we create an exact copy of our first group to have two groups. The total number of members of the two sets would be our **second multiple**.
3. To find our next multiple, we again make another exact copy of the last multiple added by another copy of the first group. The total number of members of the three sets would be our **third multiple**.
4. Keep on repeating step 3.

How to find the multiples of a number?

Multiplication Method:

Multiplying the number by 1,2,3,4,5, and so on will determine the multiples of the number

Addition Method:

To get the multiples of a number, start with the given number then add the number to the previous multiple and so forth will produce the multiples of the number.



What I Can Do

Write the first 3 multiples of the given number.

- | | | | |
|--------------------|----------------------|----------------------|----------------------|
| 1. multiples of 3 | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| 2. multiples of 15 | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| 3. multiples of 7 | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| 4. multiples of 55 | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| 5. multiples of 89 | <input type="text"/> | <input type="text"/> | <input type="text"/> |



Assessment

Visualize the first three multiples of the given number using sticks.

1. 7

--	--	--

2. 15

--	--	--

Write the first 3 multiples of the given number.

3. multiples of 9

--	--	--

4. multiples of 35

--	--	--

5. multiples of 87

--	--	--



Additional Activities

Fill in each train couch with the appropriate multiple of a number.

1.)

--

 —

8

 —

--

 —

--

 —

20

 —

24

2.)

9

 —

18

 —

--

 —

--

 —

45

 —

--

3.)

--

 —

--

 —

9

 —

12

 —

15

 —

--



Answer Key

<p>Additional Activity</p> <ol style="list-style-type: none"> 1. 4, 12, 16 2. 27, 36, 54 3. 3, 6, 18 	<p>Assessment</p> <ol style="list-style-type: none"> 1. 7 sticks, 14 sticks, 21 sticks 2. 15 sticks, 30 sticks, 45 sticks 3. 9, 18, 27 4. 35, 70, 105 5. 87, 174, 261 	<p>What I Can Do</p> <ol style="list-style-type: none"> 1. 3, 6, 9 2. 15, 30, 45 3. 7, 14, 21 4. 55, 110, 165 5. 89, 178, 267
<p>What's More</p> <ol style="list-style-type: none"> 1. 4, 8, 12 2. 11, 22, 33 3. 25, 50, 75 	<p>What's In</p> <ol style="list-style-type: none"> 1. 10, 15, 20, 25, 30 2. 24, 36, 48, 60, 72 3. 14, 21, 28, 35, 42 4. 16, 24, 32, 40, 48 5. 20, 30, 40, 50, 60 <p>What's New</p> <ol style="list-style-type: none"> 1. 10, 12, 15 2. 15, 18, 21 3. 40, 50, 60 4. 60, 72, 84 5. 35, 42, 49 	<p>What I Know</p> <ol style="list-style-type: none"> 1. <ol style="list-style-type: none"> a. 25, 50, 75, 100 b. 8, 16, 24, 32 c. 12, 24, 36, 48 d. 95, 190, 285, 380 e. 9, 18, 36, 45 2. <ol style="list-style-type: none"> a. 2 sticks, 4 sticks, 6 sticks b. 5 sticks, 10 sticks, 15 sticks c. 10 sticks, 20 sticks, 30 sticks

References

Mathematics 3 Learner's Material, Multiples of 1- to 2-digit Numbers, pages 176 – 178.

<https://study.com/academy/lesson/finding-multiples-of-whole-numbers.html>

<https://www.dreamstime.com/illustration/hamburger-cartoon-black.html>

For inquiries or feedback, please write or call:

Department of Education - Bureau of Learning Resources (DepEd-BLR)

Ground Floor, Bonifacio Bldg., DepEd Complex
Meralco Avenue, Pasig City, Philippines 1600

Telefax: (632) 8634-1072; 8634-1054; 8631-4985

Email Address: blr.lrqad@deped.gov.ph * blr.lrpd@deped.gov.ph