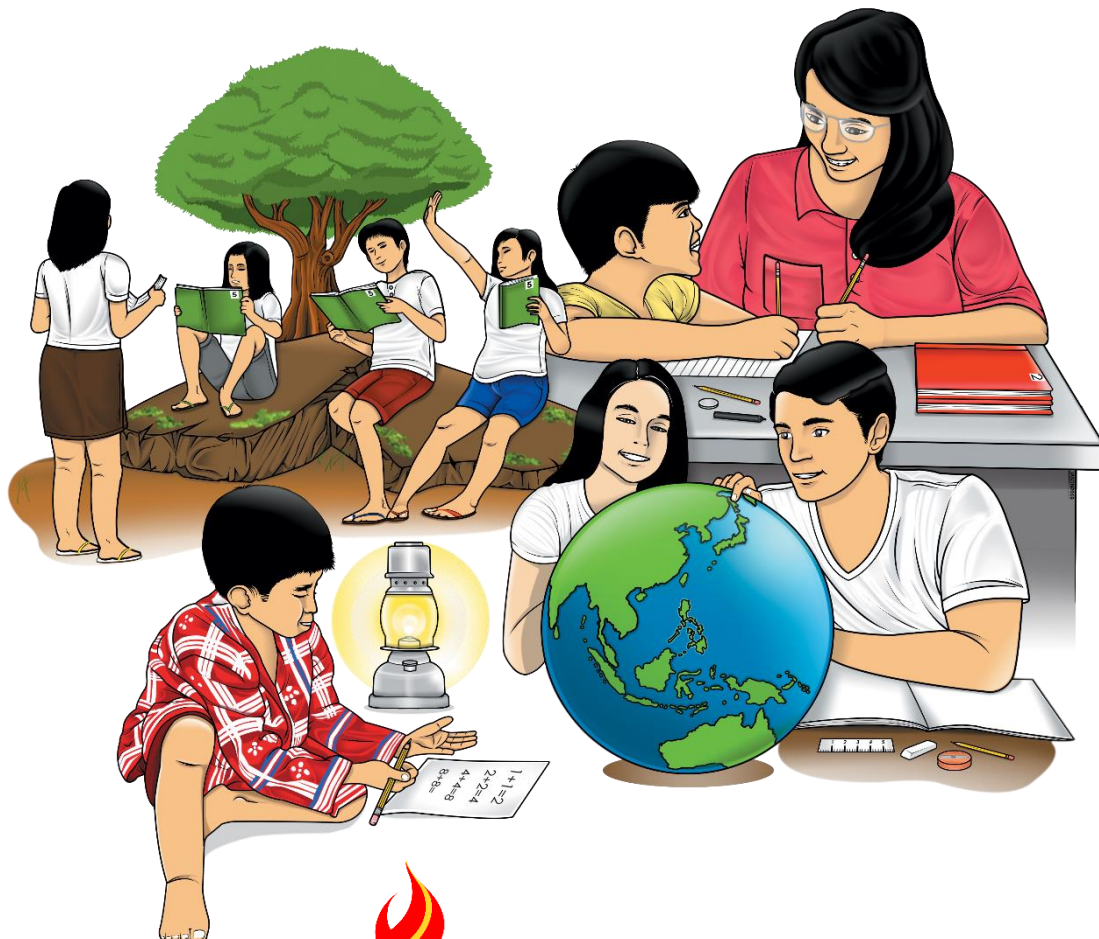


# Mathematics

## Quarter 2 – Module 7:

### Multiplying Decimals



**Mathematics – Grade 5**  
**Alternative Delivery Mode**  
**Quarter 2 – Module 7: Multiplying Decimals**  
**First Edition, 2020**

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# **Mathematics**

**Quarter 2 – Module 7:**

**Multiplying Decimals**

## **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.

Good luck and happy learning!



## ***What I Need to Know***

Good day Mathletes! In this module, you are going to gain knowledge on multiplying decimals up to 2 decimal places by 1 to 2-digit whole numbers. To multiply decimals by whole numbers, multiply like whole numbers and just ignore the decimal points. Then count the number of decimal places in the factors. The number of decimal places in the product (your final answer) will have as many decimal places as the two original numbers combined.

After going through this module, you are expected to:

- multiply decimals up to 2 decimal places by 1 to 2-digit whole numbers; and
- appreciate multiplying decimals up to 2 decimal places by 1 to 2-digit whole numbers.

**M5NS-II-d-111.1**



## ***What I Know***

Directions: Multiply. Choose the letter of the best answer. Write the chosen letter on a separate sheet of paper.

1.  $3 \times 1.28 =$

A. 3.48

B. 3.84

C. 38.4

D. 34.8

2.  $5 \times 2.24 =$

A. 11.2

B. 1.22

C. 12.1

D. 12.2

3.  $5 \times 3.54 =$

A. 17.74

B. 17.77

C. 17.7

D. 1.77

4.  $4 \times 11.23 =$   
A. 44.92      B. 4.492      C. 449.2      D. .4492
5.  $6 \times 4.75 =$   
A. 28.5      B. 2.85      C. 0.285      D. 28.50
6. What is 3.12 multiplied by 13?  
A. 4.56      B. 40.65      C. 40.56      D. 45.6
7. What is the product of 5 and 1.24?  
A. 6.1      B. 6.2      C. 6.3      D. 6.4
8. 6 times 1.32 is \_\_\_?  
A. 7.72      B. 7.92      C. 9.72      D. 97.2
9. What is 4.31 times 3?  
A. 12.93      B. 12.39      C. 2.93      D. 129.3
10. The product of 12 and 1.12 is \_\_\_\_.  
A. 11.44      B. 12.44      C. 13.44      D. 114.4

**Lesson****1****Multiplying Decimals up to 2  
Decimal Places by 1 to 2-digit  
Whole Numbers**

In multiplying decimal numbers, multiply the numbers the way we multiply whole numbers and then count the number of decimal places in the factors. The sum of the number of decimal places in the factors is equal to the number of decimal places in the product.

***What's In***

In the previous module, you have learned how to multiply 2 to 3 digits with places 1 to 2-digit number.

In multiplying 2 to 3 digits with 2-digit numbers, we multiply all the digits in the multiplicand from right to left by each digit in the multiplier. For the simplest method, we arrange numbers in a column. Regroup if necessary and lastly, add the partial products.

What is 143 multiplied by 21?

<p>STEP 1</p> <p><input checked="" type="checkbox"/> Multiply 143 by 1</p> <p><input checked="" type="checkbox"/> Regroup when the product is 10 or greater.</p> $\begin{array}{r} 143 \\ \times 21 \\ \hline 143 \end{array}$	<p>STEP 2</p> <p><input checked="" type="checkbox"/> Multiply 143 by 2</p> <p><input checked="" type="checkbox"/> Regroup when the product is 10 or greater.</p> $\begin{array}{r} 143 \\ \times 21 \\ \hline 143 \\ 286 \end{array}$	<p>STEP 3</p> <p><input checked="" type="checkbox"/> Add the partial products to get the final product.</p> $\begin{array}{r} 143 \\ \times 21 \\ \hline 143 \\ + 286 \\ \hline 3003 \end{array}$
--	---	---

So, 143 multiplied by 12 is 3,003.

Directions: Solve for the following to find the product. Show your solution.

1.  $354 \times 32 = \underline{\hspace{2cm}}$       2.  $234 \times 13 = \underline{\hspace{2cm}}$       3.  $611 \times 42 = \underline{\hspace{2cm}}$

4.  $213 \times 12 = \underline{\hspace{2cm}}$       5.  $322 \times 15 = \underline{\hspace{2cm}}$

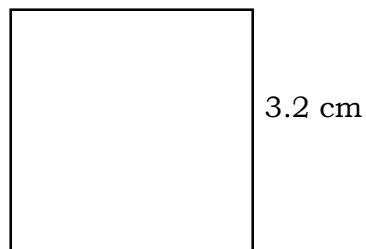


## ***What's New***

Study the image and its given measurement. With your previous knowledge about measurements you may be have an idea how to compute the square's perimeter. But try to analyze how will that knowledge be connected to this new lesson.

Look at this square.

What is its perimeter?



How can you find the perimeter?





## What Is It

### **Multiplying decimals up to 2 decimal places by 1 to 2-digit whole numbers**

To multiply decimals:

- Multiply decimals the way you multiply whole numbers.
- Next, determine where to put the decimal point in the product by counting the number of decimal places in the factors.
- Decimal places are places to the right of the decimal point.
- The product must have the same number of decimal places as the sum of the number of decimal places in the factors.

Example: (Refer to the previous part of the lesson given Figure)

Because there are 4 equal sides and each measures 3.5 cm, we can compute this as  $3.2 \times 4 = N$ . Here's how this is done.

- Multiply as with whole numbers. Write numbers in a column and regroup if necessary.

$$\begin{array}{r} 3.2 \\ \times 4 \\ \hline 128 \end{array}$$

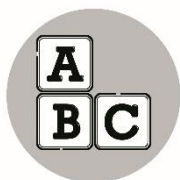
- Count the number of decimal places in the factors.

$$\begin{array}{r} 3.2 \longrightarrow 1 \text{ decimal place} \\ \times 4 \\ \hline 128 \end{array}$$

- Place the decimal point in the product. The decimal place in the product is equal to the total number of decimal places in the factors. Start counting from right to left then place the decimal point.

$$\begin{array}{r} 3.2 \\ \times 4 \\ \hline 12.8 \longrightarrow 1 \text{ decimal place} \end{array}$$

Therefore,  $3.2 \times 4 = 12.8$  cm is the perimeter of the square.



## What's More

### Practice Activity:

Directions: Find the correct answers in column B of the given question in column A.

A	B
1. What is 2.54 multiplied by 12?	A. 39.9
2. What is the product of 5 and 7.98?	B. 149.8
3. What is 21.4 times 7?	C. 12.21
4. What is the product of 3 and 8.92?	D. 30.48
5. What is 1.11 multiplied by 11?	E. 26.76
	F. 21.12

### Independent Activity 1

Directions: Complete the table by giving each product. Copy the table and write your answers and solutions on a separate sheet of paper.

X	1.9	12.92
4		
12		
8		

Hint:  $4 \times 1.9 =$  \_\_\_\_\_  
 $4 \times 12.92 =$  \_\_\_\_\_



## What I Have Learned

To multiply decimals by whole numbers, multiply like whole numbers then count the number of decimal places in the factors. The sum of the number of decimal places in the factor is equal to the number of decimal places in the product. Counting from right to left then place the decimal point.



## What I Can Do

Directions: Find the product for you to find out what the girl is thinking about. Match the letter that corresponds to the given product below to form a word. Put the letter on the provided blank.

This is Maria. Mathematics is her favorite subject. What do you think is she thinking about?



**A**  
 $3.19$   
 $\times 2$

**L**  
 $4.58$   
 $\times 3$

**V**  
 $6.40$   
 $\times 12$

**M**  
 $21.14$   
 $\times 6$

**I**  
 $13.89$   
 $\times 14$



**O**  
 $5.21$   
 $\times 8$

**T**  
 $24.2$   
 $\times 4$

**E**  
 $50.2$   
 $\times 3$

**H**  
 $2.72$   
 $\times 12$

This is what Maria is thinking...

$\overline{194.46}$

$\overline{13.74}$

$\overline{41.68}$

$\overline{76.80}$

$\overline{150.6}$

$\overline{126.84}$

$\overline{6.38}$

$\overline{96.8}$

$\overline{36.64}$



## Assessment

A. Directions: Multiply the following. Choose the letter of the best answer. Write the chosen letter on a separate sheet of paper.

1)  $0.48 \times 7 =$

- A. .336                      B. 3.36                      C. 33.6                      D. 34.6

2)  $1.24 \times 6 =$

- A. 7.44                      B. 7.48                      C. 74.4                      D. 74.8

3)  $13.91 \times 5 =$

- A. .6955                      B. 6.955                      C. 69.55                      D. 695.5

4)  $1.47 \times 21 =$

- A. 38.07                      B. 30.87                      C. 3.87                      D. 3.087

5)  $15.42 \times 11 =$

- A. 16.96                      B. 16.962                      C. 169.62                      D. 1696.2

B. Directions: Read the problem and solve. Choose the correct letter for your answer and write it on a separate sheet of paper.

1) Felix needs 6 meters of ribbon for his project. The ribbon priced at Php2.78 per meter. How much is the total cost of the ribbon?

- A. Php1.668    B. Php16.96    C. Php16.68    D. Php166.8

2) Myrna is saving Php10.25 each day. How much money will she have by the end of the third week?

- A. Php215.25    B. Php21.525    C. Php2152.5    D. Php21.525

3) Ryan wants to buy a pumpkin that weighs 4 kilos. The pumpkin is priced at Php54.75 per kilo. How much is the total cost of the pumpkin?

- A. Php21.90    B. Php219.00    C. Php2,190    D. Php219.50

4) Teacher Lanie wants to buy candies for her students. If each candy cost Php9.78 each and she has 15 students. How much money will she spend on the candies?

- A. Php146.70    B. Php14.67    C. Php1,467    D. Php1.467

5) Carlo needs to buy his medicine every week. His medicine cost Php89.96 each week. If he buys his medicine for 4 weeks, how much money will he need for his medicine?

- A. Php35.98    B. Php3,598.40    C. Php359.84    D. Php3,598.00



## Additional Activities

A. Directions: Write the equation in a column form (long method) then solve the following to get the product. Show your solution. Write your answers in a separate sheet of paper.

1)  $0.16 \times 4 =$

2)  $3.21 \times 8 =$

3)  $61.75 \times 6 =$

B. Directions: Give the missing numbers.

1) If  $637 \times 18 = 10276$ , what is the product of  $63.7 \times 18$ ?

2) If  $361 \times 6 = 1141$ , what is  $3.61 \times 6$  equal to? \_\_\_\_\_

### Independent Activity 2

Directions: Read each statement and solve the problem. Guess the word using the letters that correspond to the correct answer. Write the letter in the box before the number.


1. Carina buys 2 cupcakes at Php12.43 each in her favorite bakeshop. How much did she pay for her cupcakes?
2. Thirteen out of 15 comic books were sold at Php10.45 each. How much was the total sale?
3. Jayson jogs 1.45 miles a day. In a week, he jogged for 5 days. How far did Jayson jog for a week?
4. Luisa bought 6 packs of berry juice. Each pack of berry juice cost Php23.34. How much did she pay for the items?
5. Joel has 4 pieces of yarn which measures 9.43 m each. If he combines it all, how long is his yarn?
6. Grace wants to buy 4 pairs of hairclip at Php13.65 each. How much money will she be needing to buy the hairclips?
7. Mother baked 3 round chocolate moist cake. Each cake needs 1.75 kg of flour. How many kilograms of flour does she need in all?

<b>L</b>	<b>A</b>	<b>I</b>	<b>D</b>	<b>M</b>	<b>E</b>	<b>B</b>	<b>C</b>
<b>5.25</b>	<b>P54.60</b>	<b>P140.04</b>	<b>P24.86</b>	<b>37.72</b>	<b>P135.85</b>	<b>73.35</b>	<b>7.25</b>



# Answer Key

**What I Can Do**

194.46	13.74	41.68	76.80	150.6	126.84	6.38	96.8	36.64
I	L	O	V	E	M	A	T	H

**What's More**

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

**Independent Activity 1**

x	1.9	4	7.6	12.92
8	15.2	12	22.8	155.04
8	15.2	12	22.8	103.36

**Assessment**

- A.
  1. B
  2. A
  3. C
  4. B
  5. C
- B.
  1. C
  2. A
  3. B
  4. A
  5. A

**Additional Activities**

- A. 1.) 0.64
- 2.) 25.68
- 3.) 370.50
- B. 1.) 1146.6
- 2.) 21.66

**Independent Activity 2**

1. D
2. E
3. C
4. I
5. M
6. A
7. L

**What's In**

1. 11,328
2. 3,042
3. 25,662
4. 2,556
5. 4,830

**What I Know**

1. B
2. A
3. C
4. A
5. A
6. A
7. B
8. B
9. C
10. C

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