

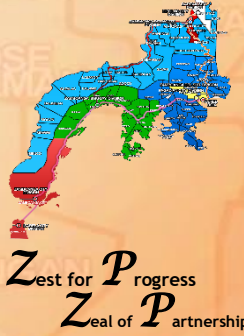
JANUARY	<i>Makugihon</i>
FEBRUARY	<i>Mahigugmaon</i>
MARCH	<i>Matinabunon</i>
APRIL	<i>Matinahuron</i>
MAY	<i>Mahapsay og Malimpyo</i>
JUNE	<i>Maabik og Masunod sa Dhaklong Oras</i>
JULY	<i>Maantigo og Maabilidad</i>
AUGUST	<i>Maginhuhunon para sa Urban</i>
SEPTEMBER	<i>Madaginton</i>
OCTOBER	<i>Matinud-anon</i>
NOVEMBER	<i>Masaligan</i>
DECEMBER	<i>Maalampunon</i>



Republic of the Philippines  
**Department of Education**  
 Regional Office IX, Zamboanga Peninsula



# 5



# MATHEMATICS

## 2<sup>ND</sup> QUARTER – Module 5: ESTIMATING PRODUCT ON DECIMALS



Name of Learner: \_\_\_\_\_

Grade & Section: \_\_\_\_\_

Name of School: \_\_\_\_\_

**Mathematics- Grade 5**  
**Alternative Delivery Mode**  
**Quarter 2 - Module 5: Estimating Products on Decimals**  
**First Edition, 2020**

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## What I Need to Know

After surpassingly doing the activities of this module, you are expected to estimate the product of decimal numbers; and solve routine and non-routine problems involving multiplication without or with addition or subtraction of decimals and whole numbers including money. **(M5NS-Ile-112, M5NS-Ile-113.1)**

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.

## Lesson

# Estimating the Products of Decimal Numbers; and Solving Routine and Non-Routine Problems Involving Multiplication Without or With Addition or Subtraction of Decimals and Whole Numbers Including Money



## What's In

In your previous lesson, you've learned on how to find the product of the decimals. Try the activity below.

Activity 1: Encircle the letter of the correct answer:

- 1)  $74.12 \times 6.3 =$       a. 486.956      b. 476.855      c. 486.956
- 2)  $5.49 \times 4.6 =$       a. 23.244      b. 24.254      c. 242.54
- 3)  $13.7 \times 0.56 =$       a. 7.561      b. 76.72      c. 404.16
- 4.)  $63 \times 2.5 =$       a. 40.416      b. 41.416      c. 404.16



## What's New

Activity 1: Round each factor to the greatest place value. Then multiply.

1.  $0.35 \times 0.43 =$

2.  $0.67 \times 0.05 =$

3.  $0.26 \times 0.7 =$

4.  $P31.50 \times P12.25 =$

Activity 2: Solve the problem:

A shoe maker sells different kinds of shoes. One day, it sold 25 pairs of sneakers at ₱105.55 a pair. How much was the total sales for the sneakers sold?

What is asked? \_\_\_\_\_

What are the given facts? \_\_\_\_\_

What is the operation to be used? \_\_\_\_\_

Solution: \_\_\_\_\_



# What is It

To **estimate** the product **round each factor** to the greatest/highest place value, **then multiply** the rounded factors.

## Study the solution:

By rounding-  
P 11.75      →      P12.00  
X 210        →      X 210

We can solve routine and non – routine problems involving multiplication without or with addition or subtraction of decimals and whole numbers including money using appropriate problem solving strategies and tools by following the steps in solving problem.

Here are the steps.

- **Understand**
  - Know what is asked.
  - Know the given facts.
- **Plan**
  - Determine the operation to be used.
  - Give the number sentence.
- **Carry out the plan**
  - Show your solution (following the rules).
- **Check and look back**
  - Check your answer, if possible change it to the simplest form.



## What's More

**Activity 1** Estimate the products of the decimal number:

$$42.5 \times 7.2 = \underline{\hspace{2cm}} \quad 61.9 \times 3.8 = \underline{\hspace{2cm}}$$

**Activity 2**

The following are some items that Alcris needs to buy from a Department Store.

pair of socks P 75.95  
shorts P 59.30

handkerchief P65.25  
face towel P 38.75

t-shirt P 119.50

About how much money must he have to be able to buy the following?

1. a pair of socks? \_\_\_\_\_
2. two t-shirts? \_\_\_\_\_
3. five face towels? \_\_\_\_\_
4. seven handkerchiefs? \_\_\_\_\_
5. three shorts? \_\_\_\_\_



## What I Have Learned

In estimating the product, round each decimal to the nearest whole number before multiplying.

To analyze and solve the problem, you can do these steps.

**A. Understand**

1. Read and understand the problem.
2. Know what is being asked in the problem.
3. Know the hidden informations.
4. Find the necessary informations.

**B. Plan**

1. Determine what operations are going to be used:
  - Multiplication
  - Addition
  - Subtraction
2. Write the number sentences for the hidden questions.

**C. Solve**

Show your solution.

**D. Check and Look Back**



Did I use the correct operations? Are the answers reasonable?  
Did I write my answer in a complete sentence?



## What I Can Do

### Activity 1

**Directions:** Read the problem then answer the questions that follow.

Mang Tomas and other farmers of Balakan harvested palay for their Araw. They were able to fill 56.5 cavans each weighing 25.5 kilograms.

1. About how many kilograms of palay were harvested for their Araw?
2. If they will sell the palay for P 24.25 a kilo?
  - A) By how much will they get for one cavan?
  - B) By how much will they get for all the palay?
3. A businessman will buy all the cavans, but he will be given 1.5 kilograms free for each cavan. About how much will he pay?



## Assessment

A. Estimate each product. Write the letter of the correct answer.

1. 
$$\begin{array}{r} 0.35 \\ \times 42 \\ \hline \end{array}$$

- a. 18                      b. 16                      c. 20

2. 
$$\begin{array}{r} 0.75 \\ \times 6 \\ \hline \end{array}$$

- a. 0.08                      b. 0.10                      c. 0.09

3. 
$$\begin{array}{r} 0.63 \\ \times 0.39 \\ \hline \end{array}$$

- a. 0.29                      b. 0.20                      c. 0.24

4. 
$$\begin{array}{r} 0.61 \\ \times 39 \\ \hline \end{array}$$

- a. 0.28                      b. 0.30                      c. 0.25

5. 
$$\begin{array}{r} 0.57 \\ \times 0.39 \\ \hline \end{array}$$

- a. 0.40                      b. 0.36                      c. 0.42

6. 
$$\begin{array}{r} 0.54 \\ \times 0.59 \\ \hline \end{array}$$

- a. 0.3                      b. 0.5                      c. 0.2

B. Read and solve for the answer:



Anna went to the market. She bought the following:

- 1.2 kg. of onions at ₱35.45 a kg.
- 1.3 kg. of tomatoes at ₱25.25 a kg.
- 1.4 kg. of potatoes at ₱28.30 a kg.

7. Find the cost of onions.      a. ₱42.54      b. ₱44.00      c. ₱44.12  
8. Find the cost of tomatoes.      a. ₱34.83      b. ₱32.83      c. ₱32.56  
9. Find the cost of the potatoes.      a. ₱39.62      b. 35.62      c. ₱34.39

Write the number sentence.

Mrs. Salvador is being paid ₱120.85 per hour of work. She worked eight hours a day for four days. On the fifth day, she worked 4.25 hours. How much did she receive for 5 days of work?

10.    a.  $(₱120.85 \times 4.25) = n$   
      b.  $(₱120.85 \times 4) + (₱120.85 \times 4.25) = n$   
      c.  $(₱120.85 \times 4) - (₱120.85 \times 4.25) = n$



# Answer Key

Assessment

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

What's In:

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

What's New

1.  $0.40 \times 0.40 = 0.16$   
 2.  $0.70 \times 0.10 = 0.07$   
 3.  $0.30 \times 0.7 = 0.21$   
 4.  $\text{P}32.00 \times \text{P}12.00 = \text{P}384$   
 5. The total amount of sneakers sold.  
 6.  $\text{P}105.55 \times 25$     7. multiplication  
 8.  $\text{P}105 \times 25 = \text{P}2,638.75$   
 What's More

Activity 1

1)  $43 \times 7 = 301$

Activity 2

1. 0.25  
 2.  $\text{P}120.00$   
 3.  $\text{P}194.00$   
 4)  $\text{P}457.00$   
 5)  $\text{P}178.00$

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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 centuries 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.”