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## Mathematics- Grade 5

## Alternative Delivery Mode

Quarter 2 - Module 4: Multiplications of Decimals
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## What I Need to Know

After surpassingly doing the activities of this module, you are expected to multiply decimals up to decimal places by $1-$ to 2 - digit whole numbers and multiply decimals with factors up to 2 decimal places. (M5NS-IId-111.1, M5NS-IId-111.2)

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, it's all depends on you.

We are with you every step of the way. Good luck, stay safe and God bless.

## Activity 1

In your previous grade, you have learned how to multiply whole numbers. Let's try these!

1. $87 \times 2=\square$
2. $5 \times 8=$ $\square$
3. $25 \times 7=$ $\square$

If we can multiply whole numbers, we can also multiply decimal numbers. Study these!

| 0.87 |  |
| :--- | ---: |
| $\times \quad 2$ | 0.63 |
| $\square$ |  |
| $\square$ |  |

## What Is It

To multiply decimals by whole numbers, multiply them as a whole numbers, then simply count the number of decimal places of the factors to determine the number of decimals.

Example 1 Find the product of 2 and 0,87 .
Solution:

| 0.87 | $\leftarrow 2$ decimal places |
| :--- | :--- |
| $X_{17} 2$ | $\leftarrow$ no decimal place |

Affix the decimal point in the product to determined by the number of decimal places of the factors.
0.87
$\times \quad 2$
$1.74 \leftarrow 2$ decimal places
To multiply decimals, multiply decimals as you would multiply whole numbers.
Example number 2 Find the product of 0.63 and 0.5 .
Solution:

$$
\begin{aligned}
0.63 & \leftarrow 2 \text { decimal places } \\
\frac{\times 0.5}{0315} & \leftarrow 1 \text { decimal place }
\end{aligned}
$$

Count the number of decimal places in both factors.
0.63
0.5
$\times 0.315$
$0.315 \leftarrow 3$ decimal places
Answer: 0.315

## What's More

## Activity 1 Find the product.

1. $2.4 \times 6=$
2. $2.25 .5 \times 7=$

1.) $0.6 \times 0.32=0192$
2.) $0.09 \times 0,45=0130$
3.) $0.29 \times 0.45=00405$

Solve .

1. A working student earns $P 25.50$ an hour. How much does he earns in 5 hours?
2. Janice receives an allowance of P 25.20 a day. How much is her allowance in 5 days?

## What I Have Learned

How do you multiply decimal numbers?

To multiply decimals by whole numbers, multiply them as a whole numbers, then simply count the number of decimal places of the factors to determine the number of decimals.


1. A working student earns P 22.50 an hour. How much does he earns in 7 hours?
2. Find the product of 0.25 and 0.86 .
3. What is the area of a rectangle with a length of 0.75 dm and $0,25 \mathrm{dm}$ ?
4. 0.45 multiplied by 0.36 gives the product of $\qquad$
5. A notebook cost P 8.35 each. If Rey buys 12 notebooks, how much should he oay to the cashier?

## Assessment

Multiple choice. Read the statement carefully. Choose the letter of the correct answer.

1. What is the product of 6 times 2,25 ?
A. 13.50
B. 13.05
C. 13.005
D. 13.500
2. Janice receives an allowance of $P 25.20$ a day. How much is her allowance in 5 days?
A. P 116
B. P 126
C. P 13
D. P163
3. If a notebook is $P 5.25$, how much is the cost of 6 notebooks ?
A. 31.50
B. 31.05
C. 32.50
D. 31.500
4. A book cost P 95.50. If Jenny buys 7 books, how much should she pay to the cashier?
A. P 666.50
B. P 667.50
C.P 668.50
D. 686.50
5. A working student earns $P 25.50$ an hour. How much does he earns in 5 hours?
A. P 126.50
B. P.127.50
C.P 127.05
D. 137.50
6.0 .28 multiplied by 0.36 gives the product of $\qquad$
A 0.1006
B. 0.1007
C. 0.1008
D. 0.1009
6. Find the product of 0.25 and 0.86 .
A. 0.215
B. 0.220
C. 0.225
D. 0.235
7. A satellite takes 95.57 minutes to orbit the earth. How many times will it take for 9.5 orbits?
A. 907.910
B. 907.915
C. 907.920
D. 908.930
8. What is the area of a triangle with a length of 0.79 dm and 0.25 dm ?
A.0.1975
B. 01980
C. 01985
D. 1970
9. The earth travels around the sun at 29.66 km per second. If Jose travels 0.71 times the speed of the earth, how fast does Jose travels?
A. 21.0586
B. 21.0567
C.22. 0586
D. 220587

## Answer Key



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