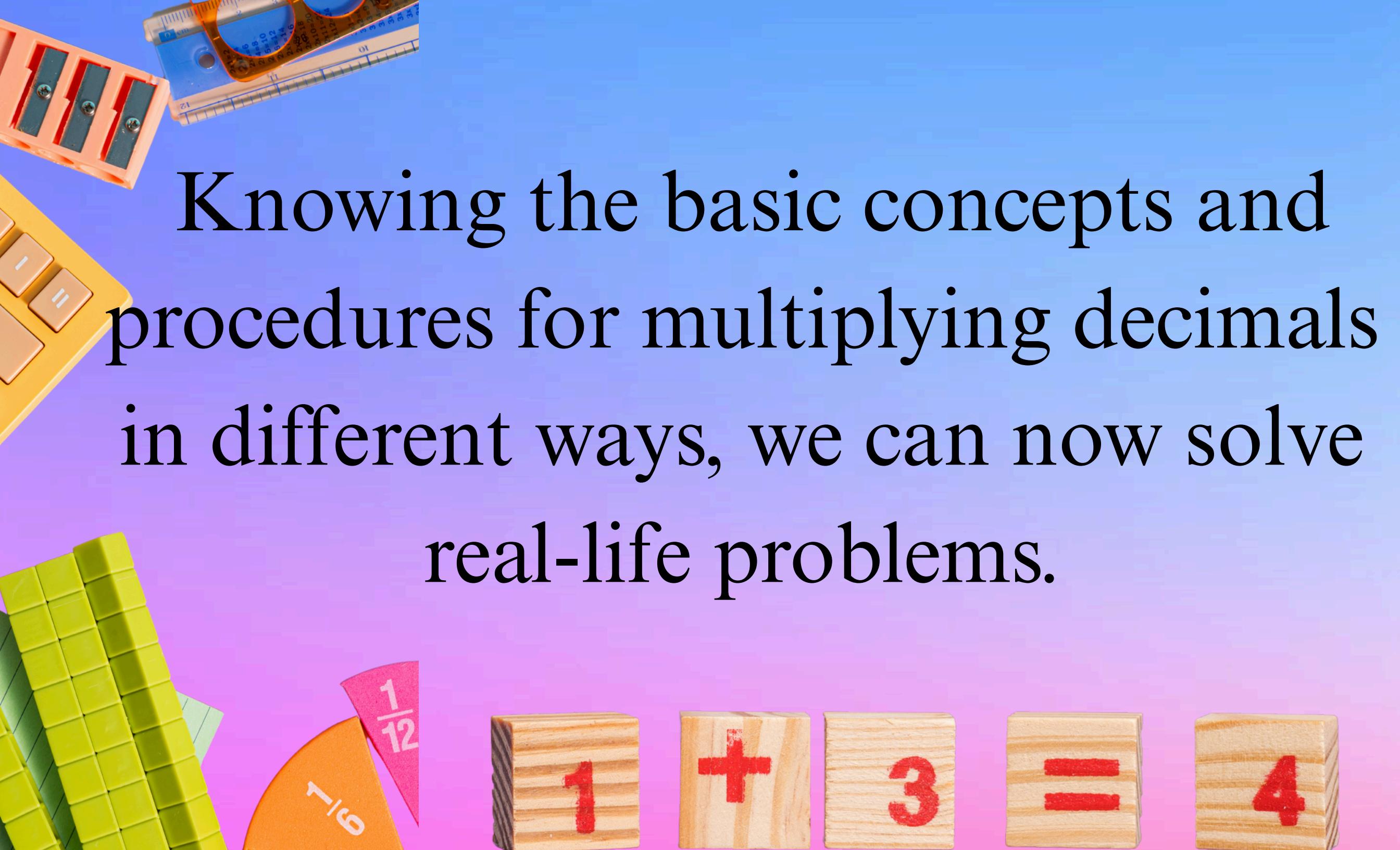


Word problems involving multiplying decimals

$$1 + 3 = 4$$

A colorful collage of school supplies forms the background. It includes a yellow calculator, an orange protractor with markings for 1/6 and 1/12, a blue ruler, an orange pencil sharpener, and a stack of green and yellow sticky notes.

Knowing the basic concepts and procedures for multiplying decimals in different ways, we can now solve real-life problems.

Example problem: A farmer is planting apple trees in his orchard. Each apple tree requires 2.5 square meters of space. If the farmer plans to plant 15 apple trees, how many square meters of land will he need in total for all the trees?

$$2.5 \times 15 = 37.5 \text{ square meters of land}$$



When **solving routine problems**, you can use at least one of the four basic math operations (**addition, subtraction, multiplication, and division**).

To help you understand the problems better, follow these steps:

1. Understand the problem and identify the given facts.
2. Determine what is being asked.
3. Make the number sentence and solve it.
4. Check your answer.



Example problem: Mr. Fernandez has a monthly pay of ₱5,450. The tax deducted from his monthly salary is 543.25. What is the actual pay he receives in a year?

1. Understand

- a. What are the given facts?
 - Sale cost ₱5,450, ₱543.25 and 12 months in a year
- b. What is asked?
 - The actual payment Mr. Fernandez receives in a year.





Example problem: Mr. Fernandez has a monthly pay of ₱5,450. The tax deducted from his monthly salary is 543.25. What is the actual pay he receives in a year?

2. Plan

- a. What is the operation to be used?
 - Multiplication and Subtraction
- b. Number sentence?
 - $(₱5,450 - ₱543.25) \times 12 = N$





Example problem: Mr. Fernandez has a monthly pay of ₱5,450. The tax deducted from his monthly salary is 543.25. What is the actual pay he receives in a year?

3. Solve the problem

$$\begin{array}{r} - 5,450 \\ - 543.25 \\ \hline \text{₱}4,906.75 \end{array}$$

$$\begin{array}{r} - 4,906.75 \\ \times \quad \quad \quad 12 \\ \hline 981350 \\ 490675 \\ \hline 58,881.00 \end{array}$$

He receives ₱58,881.00 in a year.

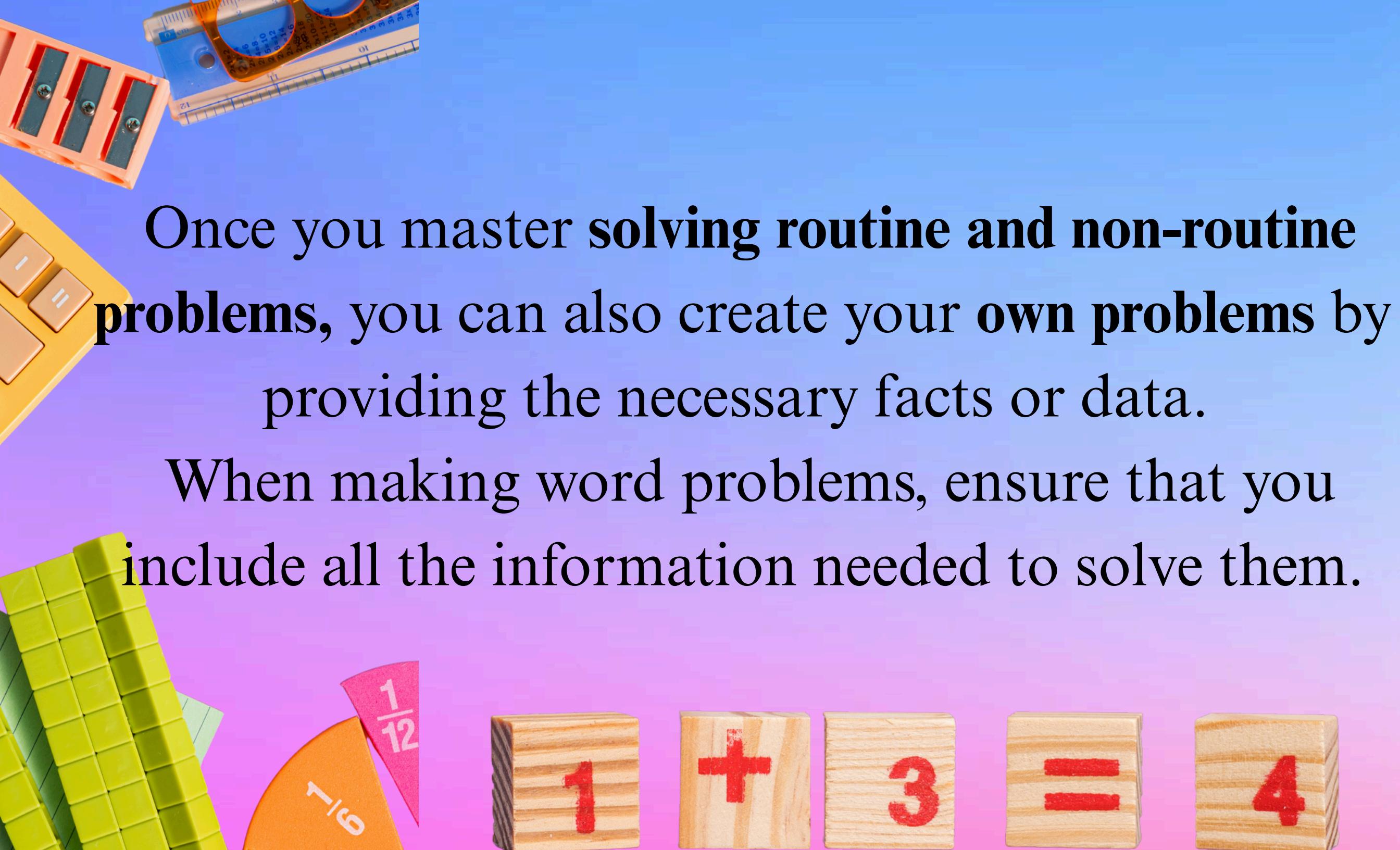


Example problem: Mr. Fernandez has a monthly pay of ₱5,450. The tax deducted from his monthly salary is 543.25. What is the actual pay he receives in a year?

4. Check

$$\begin{array}{r} - \\ 58,881.00 \\ \hline \div 12 \\ 4,906.75 \end{array}$$

He receives ₱4,906.75 per month from his salary.

A colorful collage of various school supplies is visible in the background. It includes a yellow calculator, a blue protractor, an orange ruler, a red pencil sharpener, and several green and yellow building blocks.

Once you master solving routine and non-routine problems, you can also create your own problems by providing the necessary facts or data.

When making word problems, ensure that you include all the information needed to solve them.

$$1 + 3 = 4$$