

STEPS TO UNDERSTAND AND SOLVE WORD PROBLEMS

Multi-step word problems are combinations of fundamental operations, which include hidden questions.

- 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. Reyes earns ₱28.50 per hour as an office clerk. He earns 1.75 times as his regular rate for overtime. His regular work is 40 hours per week. He gets overtime pay if he works more than 40 hours. How much is his total earnings if he works 45 hours in one week?

1. Example problem: Mr. Reyes earns ₱28.50 per hour as an office clerk. He earns 1.75 times as his regular rate for overtime. His regular work is 40 hours per week. He gets overtime pay if he works more than 40 hours. How much is his total earnings if he works 45 hours in one week?

1. Understand

- a. What are the given facts ?
 - ₱28.50 per hour
 - 1.75 times
 - 40 hours per week
 - 45 hours in one week

b. What is asked?

The total earnings of Mr. Reyes for working 45 hours in one week.

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2. Plan

- a. What is the operation to be used?
 - Multiplication and Addition
- b. Number sentence?
 - $(₱28.50 \times 40) + (1.75 \times ₱28.50 \times 5) = N$

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3. Solve the problem

Regular working hours

$$\begin{array}{r} - 28.50 \\ \times 40 \\ \hline \end{array}$$

$$\begin{array}{r} \times 40 \\ \hline 000 \end{array}$$

11400

₱ 1,140

Overtime rate

$$\begin{array}{r} - 1.75 \\ \times 28.50 \\ \hline \end{array}$$

$$\begin{array}{r} 00000 \\ 875 \end{array}$$

1400

350

49.875

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3. Solve the problem

$$\begin{array}{r} - 49.875 \\ \times \quad \quad 5 \\ \hline \text{₱}249.40 \end{array}$$

Total salary

$$\begin{array}{r} - 1,140.00 \\ + 249.40 \\ \hline \text{₱}1,389.40 \end{array}$$

Mr. Reyes earned ₱1,389.40
in 45 hours in one week.

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4. Check

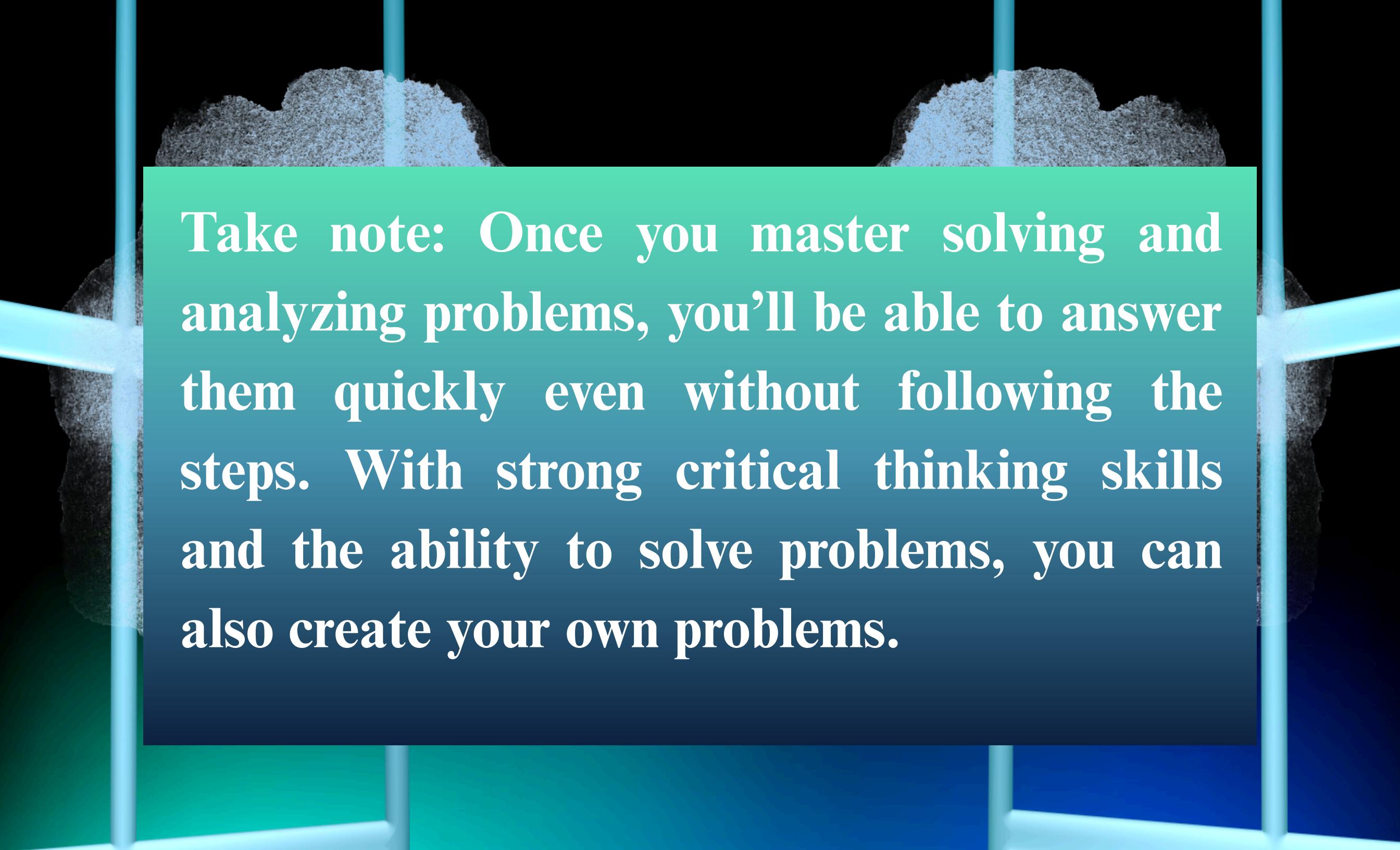
Regular working hours	-	249.40
- 1,140	÷	5
<u>÷ 28.50</u>		49.875
40		

1. Example problem: Mr. Reyes earns ₱28.50 per hour as an office clerk. He earns 1.75 times as his regular rate for overtime. His regular work is 40 hours per week. He gets overtime pay if he works more than 40 hours. How much is his total earnings if he works 45 hours in one week?

$$\begin{array}{r} - 49.875 \\ \div \underline{28.50} \\ 1.75 \end{array}$$

$$\begin{array}{r} - 1,389.40 \\ - \underline{249.40} \\ \text{₱}1,140.00 \end{array}$$

In his regular work, Mr. Reyes earned ₱1,140.00 in just 40 hours in one week.



Take note: Once you master solving and analyzing problems, you'll be able to answer them quickly even without following the steps. With strong critical thinking skills and the ability to solve problems, you can also create your own problems.