

Justify Your Mathematical Thinking

Direction: Solve the problem using an appropriate special product or factoring technique by completing the CER Organizer.

Problem Scenario

A square garden has a side length of $(x + 4)$ meters. The owner wants to determine the area of the garden.

Guide Questions:

1. Which algebraic expression represents the area?
2. Which special product pattern should be used?
3. What is the simplified polynomial?
4. Explain why this method is appropriate.

C-E-R Organizer

Claim
What is your final answer?
Evidence
Show your mathematical work.
Reasoning
Explain why your solution is correct.

Sentence Choice Bank

Claim	Choose one.
	- I conclude that... - The solution to the problem is... - The area of the figure is... - The polynomial can be factored as...
Evidence	Choose one or more.
	- Based on my computation... - Using the formula... - By applying the special product... - After factoring the polynomial... - The simplified expression is...
Reasoning	Choose one or more.
	- This solution is correct because... - The special product applies since... - Factoring helped because... - The expression represents... - Therefore, the solution is reasonable because...