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...

LIVEWORKSHEETS