

Student Activity: The AI Validator

Name: _____ Date: _____

Step 1: Solve on Paper (No Technology)

Before you use the AI, solve this quadratic equation using the factoring method.

Equation: $x^2 - 2x - 8 = 0$

1. Find two numbers that multiply to -8 and add to -2:

_____ and _____

2. Write your factors: ()() = 0

3. Find your zeros: $x =$ _____ and $x =$ _____
-



Step 2: Set up your AI Tutor

Open the AI chat on your device. **Copy and paste** this message to tell the AI how to help you:

"I am checking my math work. Please act as a helpful tutor. Do not give me the answers yet. I will give you my equation and my answers. Tell me if I am correct. If I am wrong, give me a small hint about the sum or the product."



Step 3: Check Your Work with AI

Now, type your specific work into the chat using this format:

"My equation is $x^2 - 2x - 8 = 0$. I think the factors are [your factors] and the zeros are [your zeros]. Am I right?"





Step 4: The "Deep Dive" (Pick One using AI)

Choose **one** question below to ask AI to help you understand the "why" behind the math.

Choice A (Visual): *"Can you show me a factor table for -8 so I can see the sums?"*

Choice B (The "Why"): *"Why does the $(x - 4)$ factor become a positive $x = 4$ zero?"*

Choice C (Language): *"Explain the difference between a 'factor' and a 'zero' in simple English and [Your Home Language]."*

Choice D (more practice): *"Create another similar problem so I can practice."*

Write one thing you learned from the AI's explanation (English):

Use AI to translate Step 4 into your Home Language and into English.