? Input Problem



Generate Solution



Criticize



Refine

What is the smallest positive perfect cube that can be written as the sum of three consecutive integers?

(Reference: $7 + 8 + 9 = 3 ^ 3 = 27$)

Step 1: Let the three consecutive integers be x-1, x, and x+1 ...

Step 2: Since we are looking for a perfect cube, let's express 3x ...

Step 3: However, n itself must also be divisible by 3, since ...

Step 4: The smallest integer divisible by 3 is 6, for 6 ^ 3 ...

Answer: 216

Traditional Critique

Upon reviewing my previous answer, I recognize a mistake. *I incorrectly* identified 216 as ...

Traditional Refine

Step 1: To solve the problem of finding the ... Step 2: We are given that this sum must be ...

Step 3: To ensure n is an integer, K³ must ...

Step 4: We need to find the that the small ...

Answer: 54

Our CoT Critique

Step 1: The sum of these three ...

Step 1 is correct.

Step 2: Expressing 3x as a cube ...

Step 2 is correct.

Step 3: The claim that n must be ...

Step 3 is incorrect.

Our Refine

Step 3: Since we are looking for the ...

Step 4: The smallest perfect cubes are ...

Answer: 27





Critic-CoT: Slow, Chain-of-Thought Examination Step-By-Step



