Question: Given positive integers x and y such that  $2x^2y^3 + 4y^3 = 149 + 3x^2$ . what is the value of x + y? <code> from sympy import symbols, Eq, solve # Define the variables x and y Low-quality x, y = symbols('x y')PPM score: -0.08 <end of step> # Define the equation equation = Eq $(2^*x^{**}2^*y^{**}3 + 4^*y^{**}3, 149 + 3^*x^{**}2)$ Intrinsic self-reflection: <end of step> PPM score: -0.219 Steps Thinking outside the box, find an easier solution! # Solve the equation for y in terms of x solution = solve(equation, v) # Since we need positive integers, we need to find the <end of step> PPM score: -0.348 values of x and y that satisfy the equation # We will check for small integer values of x and y for x val in range(1, 10): for y val in range(1, 10): if  $2^*x \text{ val}^{**}2^*y_\text{val}^{**}3 + 4^*y_\text{val}^{**}3 == 149 + 3^*x_\text{val}^{**}2$ :  $print(f\"x = \{x\_val\}, y = \{y\_val\}\")$  $print(f(x + y = \{x \ val + y \ val\})))$ # Now print the final answer Wrong PPM score: 0.620 break print(solution)\n end\_of\_step> <end of code> PPM score: -0.517 <output> # Now print the final answer [(3\*x\*\*2/(2\*x\*\*2+4)+149/(2\*x\*\*2+4))\*\*(1/3), -(3\*x\*\*2/(2\*x\*\*2+4)+# The loop will find the first valid pair (x, y) and print x + y $149/(2^*x^{**}2 + 4))^{**}(1/3)/2 - sqrt(3)^*I^*(3^*x^{**}2/(2^*x^{**}2 + 4) + 149/(2^*x^{**}2 + 4))$ <end of code> 4))\*\*(1/3)/2, -(3\*x\*\*2/(2\*x\*\*2 + 4) + 149/(2\*x\*\*2 + 4))\*\*<math>(1/3)/2 +<output> sqrt(3)\*I\*(3\*x\*\*2/(2\*x\*\*2 + 4) + 149/(2\*x\*\*2 + 4))\*\*(1/3)/2]x = 3, y = 2<end of output> x + y = 5PPM score: 0.698 <end of output> <answer> <answer> Wrong The value of  $\(x + y\)$  is  $\boxed{8}$ . From the result, we can see that the value of x + y is <end of answer> \\boxed{5} PPM score: -0.529 Correct PPM score: 0.835 <end of answer>