

The original problem 2C did not specify that  $n$  must be greater than 1.  
Therefore, the answer was 459, 566,406 – the product of two 5-digit numbers  
This was an unintended exercise in number crunching without a calculator.  
Everyone was given credit for the problem.

$a + b = 42875$  and  $a - b = 1 \rightarrow (a, b) = (21438, 21437) \rightarrow ab = \underline{459,566,406}$ .  
With the added condition  $n > 1$ , the original answer/solution is correct.

Problem 4B:

The solution rejected  $x = -4$  since substitution in the original equation required taking the base 2 logarithm of a complex number ( $2i$ ) which is not defined in algebra 2.

Thus, simplifying the equation to  $x^2 - 12x + 64 = 0$  invokes the rule

$a^{\log_a x} = x$ . In algebra 2, there is a restriction that  $x > 0$ .

Appeal submitted by coach of student who was taking a Complex Variables course that both answers should be accepted is denied. Actual written appeal of student never sent to me.