Title:

Engineering Challenge

July 20, 2022

Problem Statement: Write the problem statement in your own words and interpretation. What are you trying to achieve? What is being learned through this challenge?

What is better? Taking a math class for an entire year or writing to 1 million.

Materials: List the materials given (if any).

Paper, pencil

Approach: Write a description of your plan to achieve the goal of the problem statement. Add drawings/sketches/CADs if possible.

First, we calculate the amount of time to get to 1000000, which is around 222 hours at the rate of 0.8 seconds per number. Then, the amount of time that a 7th period class takes in a school year, which is 165 hours.

Solution: What is your solution to the given problem?

Taking a math class is significantly less work than writing to 10000000.

Analysis: After testing, did it achieve your goal? Either way, what could you have done better? If given more time/materials, what would you do differently?

I had forgotten that counting to a million increases in digits, meaning that it takes longer to write. In reality it would've taken around 800 hours to write to 1 million, writing one digit per 0.5 seconds.

Images:

We think that taking a math class for the rest of the semester is better than writing 1 to 1000000.
Lets say that writting one number takes around 0.8 seconds, $0.8 \times 1000000 = 800{,}000$ seconds or 222 hours.
Each 7th period is 55 min long & there are 180 school days, which means in total there are 165 hours of 7th period in an entire school year. Writting to 1 million alone would take longer than just doing a math class for an entire school year. Even adding an extra 70 hours of studying doesn't even make a significant difference. With the analysis above, we think that taking a math class for an entire year is better than writting to a million.

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