

Submission for DNY-not-ntconstruct

OTIS (internal use)

YOUR NAME HERE

June 17, 2023

1 Examples

Example 0.1 (Example)

My First Example

Example 0.2 (Walkthrough)

Hardest Celeste Level

Walkthrough. Google “Farewell”

2 Problems

Instructions: Solve [36♣]. If you have time, solve [48♣]. Problems with red weights are mandatory.

I’m concerned that we’re sitting here like I’m a responsible adult. I’m pretty sure I stopped growing up in my teens and have been faking ever since.

— xkcd 616, *Lease*

Required Problem 1 (Play Celeste, 9♣)

Happy Pride Month!

Problem 2 (Snake Simulator, 9♣)

For $n \geq 0$, compute

$$\sum_{k \geq 0} \binom{n+k}{2k} 2^{n-k}$$

Problem 3 (BAMO 2018/4, 2♣)

Let a, b, c be positive integers. Show that if $a/b + b/c + c/a$ is an integer, then $\sqrt[3]{abc}$ is an integer as well.

SNAKEO

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