

PoTW 26: Week of 1-14-2021

Problem of the Week at shsmathteam.com

Submission form: link to submit

For hints: andliu22@students.d125.org

Alternatively, you can message Andrew Liu on Facebook Messenger. Please don't be afraid to reach out for help, asking for hints is heavily encouraged if you feel stuck.

Problem of the Week #26: positive integers only

Algebra

Consider the recursion:

$$a_{n+2} = \frac{a_n + 2022}{1 + a_{n+1}}$$

for the sequence $\{a_n\}_{n\geq 1}$. Given that all a_n are positive integers, compute the minimum possible value of a_1+a_2 .