



MATH PROBLEM OF THE WEEK

Spring 2022

Problem 5

Let a_n be the number of digits of n .
Compute the sum

$$\sum_{n=1}^{\infty} \frac{1}{a_n!}.$$

We welcome solutions from everyone. The undergraduate participant from the NMSU main campus with the most correct solutions at the end of the semester will receive an award of \$500.

Solutions must be mathematically rigorous and originally obtained by the participants.
Participants will be notified if their solutions are correct within a week.

Deadline: Monday, March 28, 10 am

Send solutions to: mathpotw@nmsu.edu

More information at: <https://math.nmsu.edu/activities/math-problem-of-the-week.html>