MATH PROBLEM OF THE WEEK

Spring 2021

Problem 2

Let n be a natural number such that $n+1$ is divisible by 24. Prove that the sum of all divisors of n is also divisible by 24.

Note: A natural number a is a *divisor* of n if n is divisible by a. For example, the divisors of 6 are 1, 2, 3, 6.

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. If there are more than one winners, this amount will be divided among all of them.

Deadline: Monday, April 12, 10 am

Send solutions to: mathpotw@nmsu.edu

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