



MATH PROBLEM OF THE WEEK

Spring 2024

Problem 7

How many ways can we pick two non-empty subsets $A, B \subset \{1, 2, \dots, n\}$ where $A \cap B = \emptyset$? Simplify and justify your answer.

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, April 8, 10 am
Next problem will be posted on April 8

Send solutions to: mathpotw@nmsu.edu
More information at: <https://math.nmsu.edu/activities/math-problem-of-the-week.html>