



MATH PROBLEM OF THE WEEK

Fall 2024

Problem 8

Some people visit a petting zoo. Each animal is petted by exactly three visitors, each pair of animals is petted by exactly one visitor, and no visitor pets every animal.

What is the largest possible number of animals in the petting zoo? 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, November 18, 10 am

Next problem will be posted on November 18

Send solutions to: mathpotw@nmsu.edu

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