



# MATH PROBLEM OF THE WEEK

Fall 2022

## Problem 2

Dexter wants to plot 10 points on a square paper of dimension  $3\text{cm} \times 3\text{cm}$  such that distance between any two points is strictly greater than  $\sqrt{2}\text{cm} \approx 1.41421\text{cm}$ . If possible, how? If not, why? Prove 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, October 10, 10 am**

Next problem will be posted on October 10

**Send solutions to: [mathpotw@nmsu.edu](mailto:mathpotw@nmsu.edu)**

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