# MATH PROBLEM OF THE WEEK

## Fall 2024

### Problem 6

A 6-digit number $\overline{ABCDE4}$ multiplied by 4 is equal to another 6-digit number $\overline{4ABCDE}$. Find $A, B, C, D,$ and $E$. 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 4, 10 am**
Next problem will be posted on November 4