

Name: _____

Email: _____

Math Club: Biweekly Contest Week Three

Release Date: February 28, 2024

Instructions: Solve the following problem as best you can. The first student to submit the correct solution via email to tamumathcontest@gmail.com or to Jeremy Kubiak in Blocker 336D (with time stamp) wins!

Problem 1. Find the solution set to the equation

$$\lfloor x \rfloor^7 + \{x\}^7 = x^7 \quad \text{where} \quad \{x\} = x - \lfloor x \rfloor.$$