

Name: _____

Math Club: Contest Week Seven

Release Date: May 3, 2023

Instructions: Solve the following problem the best you can, first to submit the correct solution via email or the secretaries in Room 332 (with time stamp) wins!

Problem 1. Prove that $4^{12345} + 12345^4$ is a composite number (Hint: Try and factor this as if it is a polynomial expression).