

Week #7 Fall 2022



# Problem of the Week



Grandma has just made a batch of cookies. She is about to eat them all, when her husband arrives home. Fortunately the number of cookies in the batch will allow her to evenly split them with her husband. They are about to share the cookies when their daughter walks in. Thankfully, there is enough cookies to share among all three of them evenly. Grandma's batch of cookies is tested again when her grandson shows up, and again when her granddaughter shows up, and again when her grandchildren's 7 friends show up. Each time, the number of cookies she has made can be evenly split among the cookie eaters. What is the smallest number of cookies she could have made in a batch (assume she did make cookies)?

Undergraduates may submit solutions to the Mathematics Department office, 1150 FAB **or** by email to [waynepotw@gmail.com](mailto:waynepotw@gmail.com) by noon 11/8/2022. Include your name, ID number, and whether you have completed Math 2030 (or higher). For more information go to <https://clas.wayne.edu/math>. Solutions will be posted online and throughout the math department after the deadline.