

Week #9 Fall 2024



Problem of the Week



Let's amp up last week's problem. You have a combination lock, whose combination is not as easy to remember. The lock allows values from 0 to 59. Your combination has the following features: let x be the first number, y be the second number and z be the third number, then

$$x^2y \div z = 60$$

If you try out each possible combination and the lock is opened after the final attempt, how long will it take you to open the lock if each attempt takes 15 seconds?

Undergraduates may submit solutions to the Mathematics Department office, 1150 FAB **or** by email to mathpow@wayne.edu by noon 11/12/2024. 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.