

Week #5 Winter 2024

Problem of the Week



You have two one-hour fuses: lighting one end of a fuse will cause it to burn down to the other end in exactly one hour's time. You know nothing else about the fuses; in particular you don't know how long any segment of a fuse will burn, only that an entire fuse takes one hour. How can you tell when exactly 45 minutes have passed?

Undergraduates may submit solutions to the Mathematics Department office, 1150 FAB **or** by email to mathpow@wayne.edu by noon 2/27/2024. 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.