

Week #2 Fall 2023



Problem of the Week



A rectangular room in an old house is 4 feet longer than it is wide and 3 feet taller than it is long. A box in the middle of this otherwise empty room has a volume that is half that of the entire room. The box is a perfect cube. How large is the room if the edges of the box touch the a pair of opposite walls?

Undergraduates may submit solutions to the Mathematics Department office, 1150 FAB **or** by email to mathpow@wayne.edu by noon 10/17/2023. 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.