

Week #5 Winter 2022

Problem of the Week



This year you would like to purchase a (perfectly spherical) pumpkin that you will paint the outside red and fill the inside with red paint. If you would like to use an entire gallon of red paint to both, paint the outside and fill the inside, how large of a pumpkin do you need? For this problem, assume that a gallon of paint can cover 400 square feet of space and that the thickness of the pumpkin flesh is exactly one inch.

Undergraduates may submit solutions to the Mathematics Department office, 1150 FAB **or** by email to waynepotw@gmail.com by noon 3/22/2022. 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.