

Basic Information

This assignment is due on Gradescope by **1:30 PM on Friday, November 15**.

Make sure you understand MHC [honor code](#) and have carefully read and understood the additional information on the [class syllabus](#). I am happy to discuss any questions or concerns you have!

A major component of this class is helping you understand *why* the mathematics you use works the way it does. To that end, make sure you show all your work as you will be graded on the *process* you use, not just your final answer. And if a question asks you to explain why something is true, be sure to answer that part of the question in complete sentences. Remember, answers without any work will receive 0 points.

The homework problems will be graded anonymously so please do not put your name or other identifying information on the pages.

Turn-In Problems

4.5: 12

4.7: 6, 22 (for #22, just use L'Hôpital rule, you don't need to predict the answer)

4.6: 20, 26, 28, 34 (volume of a cylinder: $V = \pi r^2 h$ and sphere: $V = \frac{4}{3} \pi r^3$).

Hint for #34: the volume of the clay is a fixed number.

Additional Problems (to do on your own, not to turn in)

4.5: 11

4.7: 7, 23 (for #23, just use L'Hôpital rule, you don't need to predict the answer)

4.6: 21, 25, 27, 29, 33