MAT 101 Calculus I
Homework 16

Basic Information

This assignment is due on Gradescope by **3:00 PM on Friday, April 10**.

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

4.1: 44
4.2: 10, 12
4.3: 18
4.5: 8
4.6: 12, 16 (Hint for 16: to find $x'(t)$, find an equation for the perimeter and then take a derivative of both sides of that equation.)

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

4.1: 43
4.2: 9, 13, 40
4.3: 19
4.5: 9
4.6: 13, 17