

MATH 203 Calculus III

Homework 3

Basic Information

This assignment is due on Gradescope by **1:30 PM on Friday, February 7**.

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!

Since this is a 200-level mathematics course, quite a few homework questions will ask you to explain your reasoning or process for solving a problem. Whenever possible, write your explanations in complete sentences and write your answers as if you were explaining to a peer in the class.

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

Turn In Problems

- 10.2: 14, 18
- 10.3: 8, 22
- 10.4: 8, 20
- Find a unit vector that is orthogonal to both $\langle 1, 1, 0 \rangle$ and $\langle 1, 0, 1 \rangle$
- Use vectors to decide whether the triangle with vertices on the points $(1, -3, -2)$, $(2, 0, -4)$, and $(6, -2, -5)$ is a right-angle triangle.

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

- 10.2: 13, 17, 25
- 10.3: 9, 21
- 10.4: 7