MATH 203 Calculus III
Homework 8

Basic Information

This assignment is due on Gradescope by **1:30 PM on Friday, February 28**.

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.

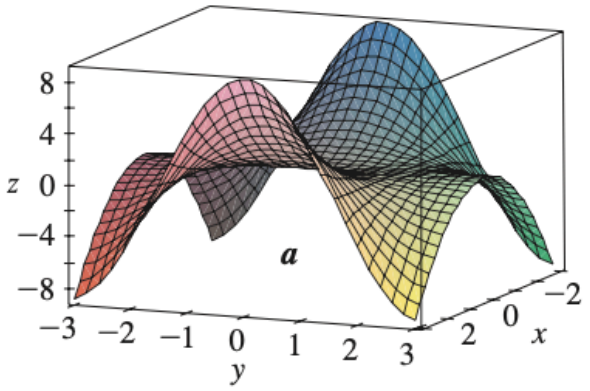
The homework problems will be graded anonymously so please do not put your name or other identifying information on the pages.

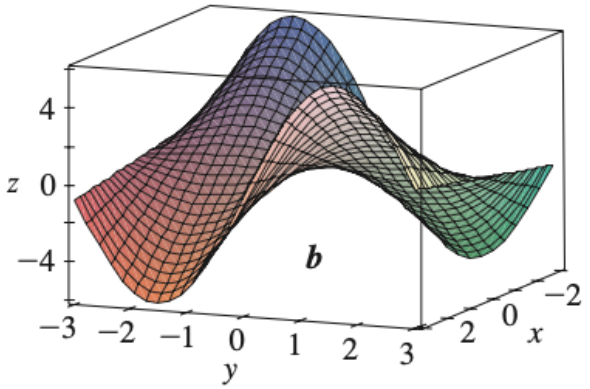
Turn In Problems

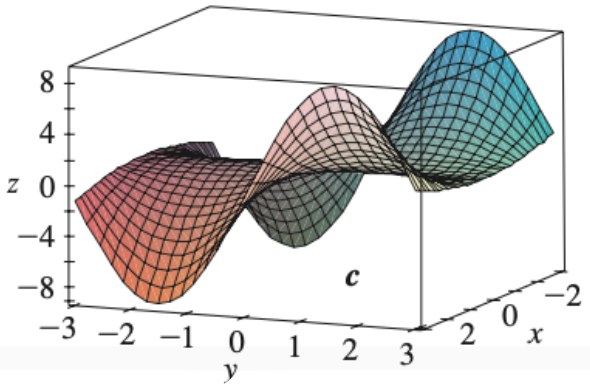
- 12.3: 10, 14, 20, 26, 34
- 12.7: 18
- #7. On the next page are three surfaces, labeled a, b, and c. One of the graphs is a function f and the other two are graphs of the partial derivatives f_x and f_y. Determine which surface is which, and give reasons for your choices.

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

- 12.3: 5, 9, 13, 17, 19, 33
- 12.7: 17


8
4
z 0
−4
−8
−3 −2 −1 0 1 2 3
y
2 0 −2
x
a


4
z 0
−4
−3 −2 −1 0 1 2 3
y
2 0 −2
x
b


8
4
z 0
−4
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−3 −2 −1 0 1 2 3
y
2 0 −2
x
c