Basic Information

This assignment is due on Gradescope by **1:30 PM on Friday, March 14**.

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.
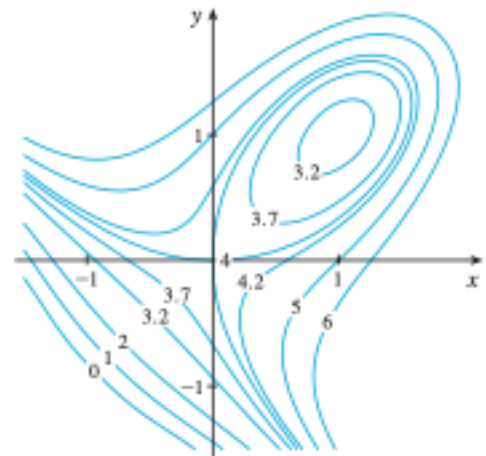
Turn In Problems
- 12.6: 26
- 12.8: 8
- #3. Find the shortest distance from $(2, -2, 3)$ to the plane $2x + 3y - z = 1$.
- #4[1]: To the right and below are two level curve pictures. From those pictures, determine approximate locations of the critical points, and say whether those critical points are maximums, minimums, or saddle points. Briefly explain why (based only on the level curves) you know the points are maximums, minimums or saddle points.
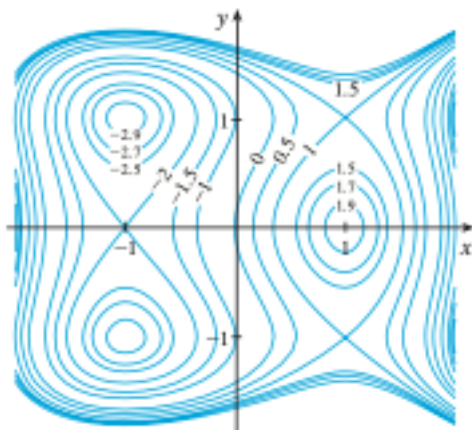
Level Curve 1

Level Curve 2

Additional Problems (to do on your own, not to turn in)
12.6: 25

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[1] Problem 4 is from Stewart Calculus: Early Transcendentals 6th edition, page 931-932.

12.8 9