

MATH 223  
Hints and Answers

*Assignment 10*

- 3.** This is a problem about inequalities involving real numbers. It does not involve any differentiation. You might begin by drawing 2 pictures, one where  $M$  is positive and another where it is negative to get a sense of what these inequalities are asserting geometrically.
- 7.** Consider what happens if you approach the origin along the line  $y = x$ ,
- 10.** You've done this problem in a previous assignment.
- 15.** Theorem 4.1.1 will be helpful along with the definition of differentiability.
- 16.** Use the results of Exercise 15.