Math 110 (Section 002) Learning Objectives

Students should be able to do the following things by the end of each respective unit. Additions may be made as the term progresses.

The First and Second Derivative Test

1. State and explain the First and Second Derivative Tests.

2. Use the First and Second Derivative Tests to find local and global extrema of differentiable functions (or possibly functions that are not differentiable at a few points).

3. Given a differentiable function, identify its intervals of increase and decrease as well as its extrema (again perhaps with a few points of non-differentiability).