21-120: Differential and Integral Calculus
Lecture #1 Outline

Read: Sections 2.1, 2.2 of the textbook

Objectives and Concepts:

- The study of Calculus is motivated by two historical problems: the problem of finding the instantaneous rate of change of a function, and the problem of finding the area between a given curve and the x-axis.
- To begin our journey towards understanding and solving these historically significant problems, we develop a language to describe the behavior of functions near a point of interest - the limit of a function.

Suggested Textbook Exercises:

- 2.1: none.
- 2.2: 46-80 all.

Topics:

1. The course instructor will go over the Course Syllabus.
2. In the time remaining, the course instructor will discuss the motivating problems that led to the development of differential and integral calculus.