Section Notes 1

Covering no Lecture

Class Outline

1. Welcome/Logistics
2. Introductions
3. Brief Math Review

1 Introductions

Introduce yourself to someone and write down the following information of the person you met (not your own).

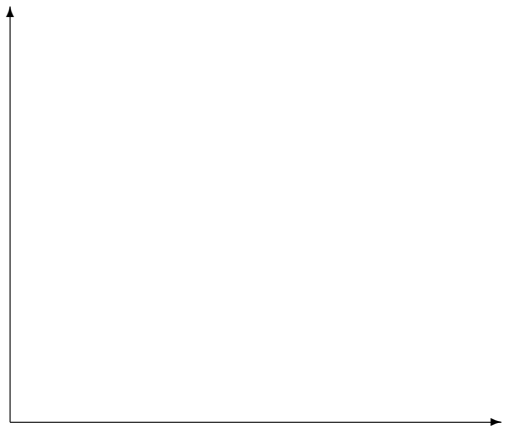
1. Name
2. Intended Major
3. Where were you over the break and something you did.

2 Brief Math Review

A comfort and ability to manipulate a few math concepts is essential to your success in this class. The following is a brief review of math we will assume you know fundamentally well.

1. Graph the following two equations and solve for the point of intersection.

$$\begin{aligned} y &= 3x + 6 \\ y &= -6x + 24 \end{aligned}$$



2. Give a linear function that goes through the following two points: (1,4) and (5,1).

3. Calculus (single variable) - Differentiate the following equations with respect to x:

$$\begin{aligned} y &= 3x - 2 \\ y &= -2x^2 - 5x \end{aligned}$$

What does the derivative mean?

4. Calculus (multi-variable) - Take the partial derivatives of the following equations:

$$\begin{aligned} u(x,y) &= x^2y + x \\ u(x,y) &= x^3y^2 + 3xy + 4x - 2y \end{aligned}$$

What do partial derivatives mean?