

## Math 147B - Elementary Statistics - Spring 2023

### Homework 01

This homework will not be graded but you are strongly advised to study the following material about summation and lines in the plane. Although these topics will be reviewed briefly in your first discussion section, it is assumed that you have familiarized yourself with them.

#### Summation notation

- <http://onlinestatbook.com/2/introduction/summation.html>
- <http://www.columbia.edu/itc/sipa/math/summation.html>
- <http://www.purplemath.com/modules/series.htm>
- <http://www.purplemath.com/modules/series2.htm>
- <http://study.com/academy/lesson/summation-notation-rules-examples-quiz.html#lesson>

#### Lines in the plane

- <http://www.purplemath.com/modules/slopgrph.htm>
- <http://www.purplemath.com/modules/strtlneq.htm>

**Venn diagrams** (used in ch.13 and 14 for graphing events).

- <https://cacoo.com/blog/understanding-venn-diagram-symbols-examples/>

Read the following before and after you click on the link above. It is about the way in which the notation of the text differs from that used in that tutorial.

- (1) We will usually write “**A and B**” for the intersection  $A \cap B$  of the items that belong to both  $A$  and  $B$ .
- (2) We will usually write “**A or B**” for the union  $A \cup B$  of the items that belong to either  $A$  or  $B$  or to both.
- (3) We will also write “**not A**” or “**opposite of A**” for the complement  $A^c$  of  $A$ , i.e., the items that do **not** belong to  $A$ .