

# Math 147B - Elementary Statistics

## Spring 2023 Final Exam Version A

Signature: \_\_\_\_\_

This Exam is worth a total of 300 points.

### Instructions

- This final has a label with your name. If this is not your final then **you must find your seat or 30 point will be taken off your grade**. See your TA if you cannot find your seat!
- Turn off all electronic devices including, but not limited to, cell phones, tablet, laptops, ...
- The only exception to the above rule is that you may use a scientific or basic calculator. No cell phone calculators, graphing calculators, programmable calculators!
- IT IS OK to use a pencil to write the exam.
- In order to get full credit, you must show all your work, clearly and in order. Points will be taken off if we cannot see how you arrived at your answer (even if your final answer is correct).
- Use the empty back pages for scratch and **if you run out of space** for the solutions. Unless you explicitly write a remark such as "**continued on the back**" the TAs will assume that a back page only contains scratch work and not grade what you wrote there!
- We use "SD" as abbreviation for "standard deviation" and in formulas you may see either of "SD" or "s" (e.g., either of  $SD_x$  or  $s_x$  denotes the SD of the  $x$ -variable). If the symbol " $r$ " is used without further explanation then it denotes the correlation coefficient.
- This exam has 14 problems on pages 2–12 and is worth 300 points. It is your responsibility to verify that you have all of the pages, including pages 14–16 which contain tables for the  $z$ ,  $t$  and  $\chi^2$  distributions. **Do not remove the staple!**
- Do NOT return your index card with your exam.
- Good Luck!

**DO NOT TURN THIS PAGE UNTIL TOLD TO DO SO.**

Problem	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Total
Pts earned															
Out of	16	15	10	50	25	21	12	20	20	20	24	15	20	32	300