#### SOCI 33003: SOCIAL STATISTICS

### Summer I 2025

### Homework 2

(Due on June 6 (Friday), 2025 @ 12:00 pm)

NAME:

**STUDENT ID:** 

### Question 1 (20 pts)

Between Median and Mean, which one is more reliable measure in representing central tendency when the data has extreme outliers (either extremely high or low outliers), and why?

# Question 2 (30 pts)

For the following raw data, please calculate its mode, median, mean, variance (S2), and st.d. (S)

Case #	Age
1	26
2	24
3	12
5	10
5	37
6	89
7	45
8	19
9	37
10	18
11	37

# Question 3 (30 pts)

For the following data in frequency table, please calculate its mode, median, mean, variance  $(S^2)$ , and st.d. (S)

age	frequency	Cumulative frequency
1	126	
12	24	
39	12	
47	10	
55	37	
63	189	
107	4	
N		

## **Question 4 (20 pts)**

Please compute IQV for the following two cities in terms of their respective racial composition. Which city has more racial diversity and why?

Race	City F	City S
White	76%	42%
Black	6%	4%
Asian	3%	2%
Hispanic	10%	28%
Others	5%	24%
IQVs		