# SOCI 33003: SOCIAL STATISTICS

# Summer I 2025

# Homework 3

(Due on June 13 (Friday), 2025 @ 12:00 pm)

**NAME:**

**STUDENT ID:**

**Question 1 (25 pts)**

For the following cases, please compute their Z scores, and percentiles

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| 25 | 32 | 4 |  |  |
| 98 | 99 | 2.5 |  |  |
| 76 | 73 | 5 |  |  |
| 58 | 48 | 7 |  |  |
| 150 | 145 | 10 |  |  |

**Question 2 (25 pts)**

The following data show the information of “sex” and “being afraid of walking at night for 12 respondents.” Based on the data, answer the following questions,

Case # Sex Afraid of walking at nights

1 Male No

2 Male No

3 Male No

4 Female Yes

5 Female Yes

6 Male No

7 Female Yes

8 Female Yes

9 Female No

10 Male Yes

11 Female No

12 Female No

Produce the crosstabulation, be sure to include the cell percentages, the row

margins, the column margins, and the total number of cases in the table

**Question 3 (30 pts)**

For the following cross-tabulation, answer the following questions

|  |  |  |  |
| --- | --- | --- | --- |
| **Satisfaction with income** | **Race** | |  |
| white | Black | RM |
| Satisfied | 437 | 81 |  |
| neutral | 269 | 102 |  |
| Not satisfied | 100 | 173 |  |
| CM |  |  | N = |

1) what is the independent variable, and what is the dependent variable (10 pts)?

2) please compute its chi-square () (20 pts)

**Question 4 (20 pts/10 pts each)**

(hint: no need to answer “why”)

![A picture containing table

Description automatically generated]()

![A screenshot of a cell phone

Description automatically generated]()