SOCI 33003: Social Data and Analysis

Summer I 2025

Homework 1

<u>(Due on May 30 – Friday, 2025 @ 12:00 pm)</u>

<u>NAME:</u>

<u>STUDENT ID:</u>

Question 1 (30 pts)

Check (✔) whether each of the following is a constant or a variable.

Constant	Variable	Constant or Variable?
☐	☐	a. Number of songs in the "Top 40" list
☐	☐	b. The popularity of ice cream over the past 20 years
☐	☐	c. Average family size
☐	☐	d. The population of Los Angeles in the 2000 census
☐	☐	e. Number of ounces in a pound
☐	☐	f. Food preferences of Americans
☐	☐	g. Games won by New York Yankees in 2001
☐	☐	h. Opinions about prayer in public schools
☐	☐	i. Americans' attitudes toward Congress
☐	☐	j. Annual federal spending since 1990

Question 2 (30 pts)

Identify what type of variables in the following list

Level of Measurement				Variable
Nominal	Ordinal	Int/Ratio		
☐	☐	☐	a.	Whether respondent has ever been divorced (yes, no)
☐	☐	☐	b.	Estimate of percentage of U.S. population that is Hispanic
☐	☐	☐	c.	Religion (Protestant, Catholic, Jewish)
☐	☐	☐	d.	Has one's financial situation been getting better or worse, or staying the same?
☐	☐	☐	e.	Confidence in science (great deal, only some, hardly any)
☐	☐	☐	f.	Opinion about whether a racist should be allowed to teach in a college or university (allowed, not allowed)
☐	☐	☐	g.	Percentage of population that is overweight
☐	☐	☐	h.	Average age of state's residents
☐	☐	☐	i.	Library visits per capita in the 50 states

Question 3 (10 pts)

Check (✔) whether each of these variables is dichotomous or nondichotomous.

Dichotomous?		Variable
Yes	No	
❏	❏	a. Whether respondent has ever been divorced (yes, no)
❏	❏	b. Estimate of percentage of U.S. population that is Hispanic
❏	❏	c. Religion (Protestant, Catholic, Jewish)
❏	❏	d. Has one's financial situation been getting better or worse, or staying the same?
❏	❏	e. Confidence in science (great deal, only some, hardly any)
❏	❏	f. Opinion about whether a racist should be allowed to teach in a college or university (allowed, not allowed)
❏	❏	g. Percentage of population that is overweight
❏	❏	h. Average age of state's residents
❏	❏	i. Library visits per capita in the 50 states

Question 4 (30 pts)

For the following raw data, please convert them into frequency table format with variable groups, frequencies, and percentages

Here are the educations of 40 General Social Survey respondents:

Education	Education	Education	Education
<Hi School	College	Hi School	<Hi School
College	Hi School	College	Hi School
Hi School	<Hi School	Hi School	Hi School
Hi School	Hi School	Hi School	Hi School
Hi School	College	<Hi School	College
Hi School	<Hi School	Hi School	Hi School
College	College	Hi School	College
Hi School	Hi School	Hi School	College
Hi School	<Hi School	College	Hi School
College	College	Hi School	Hi School