

SOCI 33004: Social Data and Analysis

Summer I 2026

Homework 1

(Due on May 29 – Friday, 2026 @ 12:00 pm)

NAME:

STUDENT ID:

Question 1 (30 pts)

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

Constant	Variable	Constant or Variable?
<input type="checkbox"/>	<input type="checkbox"/>	a. Number of songs in the "Top 40" list
<input type="checkbox"/>	<input type="checkbox"/>	b. The popularity of ice cream over the past 20 years
<input type="checkbox"/>	<input type="checkbox"/>	c. Average family size
<input type="checkbox"/>	<input type="checkbox"/>	d. The population of Los Angeles in the 2000 census
<input type="checkbox"/>	<input type="checkbox"/>	e. Number of ounces in a pound
<input type="checkbox"/>	<input type="checkbox"/>	f. Food preferences of Americans
<input type="checkbox"/>	<input type="checkbox"/>	g. Games won by New York Yankees in 2001
<input type="checkbox"/>	<input type="checkbox"/>	h. Opinions about prayer in public schools
<input type="checkbox"/>	<input type="checkbox"/>	i. Americans' attitudes toward Congress
<input type="checkbox"/>	<input type="checkbox"/>	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	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	a. Whether respondent has ever been divorced (yes, no)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	b. Estimate of percentage of U.S. population that is Hispanic
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	c. Religion (Protestant, Catholic, Jewish)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	d. Has one's financial situation been getting better or worse, or staying the same?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e. Confidence in science (great deal, only some, hardly any)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	f. Opinion about whether a racist should be allowed to teach in a college or university (allowed, not allowed)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	g. Percentage of population that is overweight
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	h. Average age of state's residents
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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	
<input type="checkbox"/>	<input type="checkbox"/>	a. Whether respondent has ever been divorced (yes, no)
<input type="checkbox"/>	<input type="checkbox"/>	b. Estimate of percentage of U.S. population that is Hispanic
<input type="checkbox"/>	<input type="checkbox"/>	c. Religion (Protestant, Catholic, Jewish)
<input type="checkbox"/>	<input type="checkbox"/>	d. Has one's financial situation been getting better or worse, or staying the same?
<input type="checkbox"/>	<input type="checkbox"/>	e. Confidence in science (great deal, only some, hardly any)
<input type="checkbox"/>	<input type="checkbox"/>	f. Opinion about whether a racist should be allowed to teach in a college or university (allowed, not allowed)
<input type="checkbox"/>	<input type="checkbox"/>	g. Percentage of population that is overweight
<input type="checkbox"/>	<input type="checkbox"/>	h. Average age of state's residents
<input type="checkbox"/>	<input type="checkbox"/>	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