MS 204 In-class Problems

January 13, 2025

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Chapter 1 Section 1

Determine whether the statement describes a population or a sample.

The price of homes of all the employees at a software company.

- Population
- Sample

Determine whether the statement describes a population or a sample.

The heights of 5 out of the 32 eggplant plants at Mr. Lonardo's greenhouse.

- Population
- Sample

Identify the **population** being studied.

The number of times 10 out of 20 students on your floor order pizza in a week.

- The 20 students on your floor.
- All students who ordered pizza in a week.
- The 10 students on your floor.

Determine whether the statement describes a descriptive or inferential statistic.

A recent poll of 1443 luxury car owners in West Virginia showed that the average price of a luxury car in the U.S. is $48,900.

- Descriptive Statistic
- Inferential Statistic

Determine whether the statement describes a descriptive or inferential statistic.

The average price of a car at the new car dealership in town is $28,400.

- Descriptive Statistic
- Inferential Statistic

Determine if the numerical value describes a population parameter or a sample statistic.

A recent poll of 2935 corporate executives showed that the average price of their cars is $27,100.

- Population Parameter
- Sample Statistic

Determine if the numerical value describes a population parameter or a sample statistic.

The average price of a house in the new subdivision is $339,000.

- Population Parameter
- Sample Statistic

Identify the sample chosen for the study.

The number of times 4 out of 37 students on your floor order take-out in a week.

- The 4 students on your floor.
- All students who ordered take-out in a week.
- The 37 students on your floor.

Chapter 1 Section 2

Types of cars people own are an example of which type of data?

- Qualitative
- Quantitative
- Inferential
- Statistic

Football jersey numbers are an example of which type of data?

- Qualitative
- Quantitative
- Inferential
- Statistic

Goals scored during a soccer game are an example of which type of data?

- Qualitative
- Quantitative
- Inferential
- Statistic

Indicate the level of measurement for the data set described.

Monthly amounts of rain in Seattle over 10 years

- Interval
- Ratio
- Ordinal
- Nominal

Indicate the level of measurement for the data set described.

Categories of hurricanes that have hit the Atlantic coast

- Interval
- Ratio
- Ordinal
- Nominal

Classify data as discrete or continuous

Lengths of time it takes for new light bulbs to burn out are an example of which type of data?

- Discrete
- Continuous
- Neither

Classify data as discrete or continuous

Types of movies people go to see are an example of which type of data?

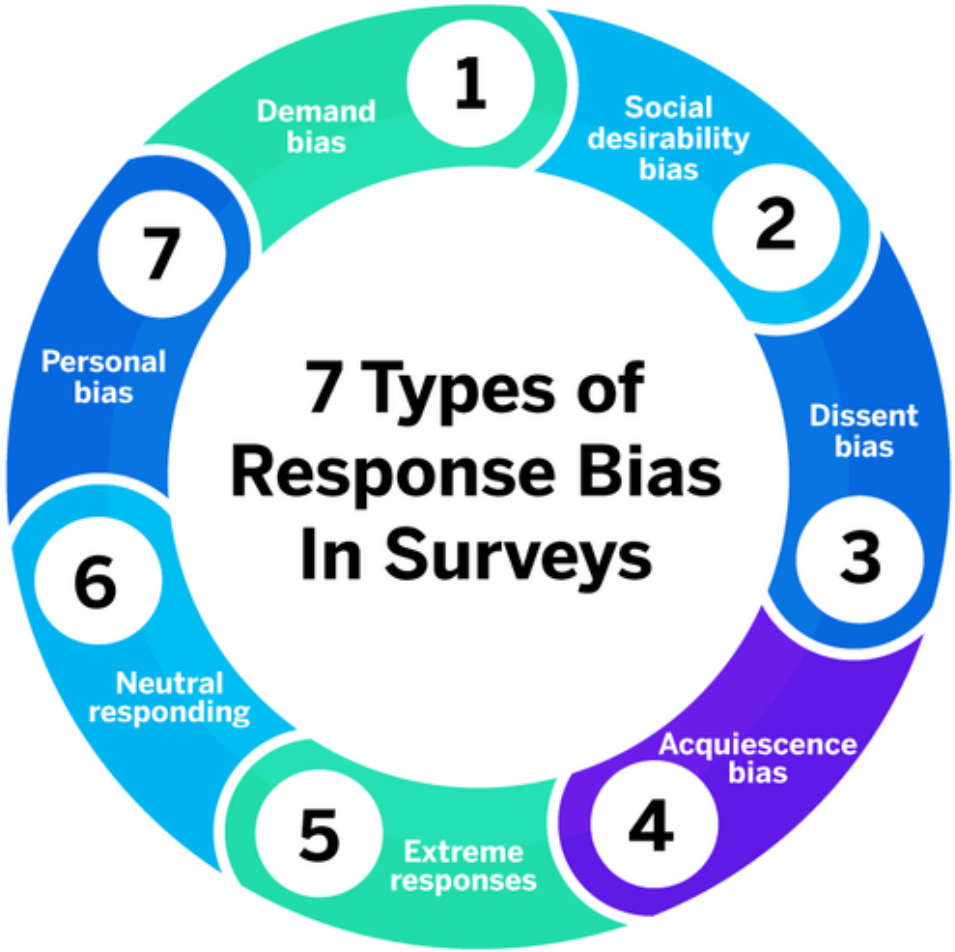
- Discrete
- Continuous
- Neither

Classify data as discrete or continuous

The numbers of each color of jelly beans in a jar (assuming they are all whole) are an example of which type of data?

- Discrete
- Continuous
- Neither

Chapter 1 Section 4



What is response bias and how can you avoid it?[1]

[1] This webpage seems to explain each type well, but I didn't read every sentence. I mainly put the link here for attributive purposes.

Chapter 2 Section 1

The following data describes grades of students in biology. Complete the frequency table for this data.

88.2,94.9,86.6,80.0,83.5,96.1,87.3,89.7,83.5,93.1,89.5,88.6,
95.2,96.7,86.8,96.8,95.1,89.0,88.2,94.9,86.6,80.0,83.5,96.1,
87.3,89.7,83.5,93.1,89.5,88.6,95.2,96.7,86.8,96.8,95.1,89.0

Determine the frequency of each class in the table shown.

Grades of Students in Biology	
Class	Frequency
77.0–80.9	
81.0–84.9	
85.0–88.9	
89.0–92.9	
93.0–96.9	

Consider the following frequency table representing the distribution of hours students spend on homework in a week.

Hours Students Spend on Homework in a Week	
Class	Frequency
19–28	3
29–38	11
39–48	15
49–58	6
59–68	9

Determine the class width of each class.

Consider the following frequency table representing the distribution of hours students spend on homework in a week.

Price of a Newspaper (in Dollars)	
Class	Frequency
0.34–0.42	11
0.43–0.51	12
0.52–0.60	14
0.61–0.69	10
0.70–0.78	10

Determine the class width of each class.

Consider the following frequency table representing the distribution of cost of a paperback book (in dollars).

Cost of a Paperback Book (in Dollars)	
Class	Frequency
5.7–6.1	6
6.2–6.6	13
6.7–7.1	12
7.2–7.6	14
7.7–8.1	1

1. Determine the relative frequency for the second class as a simplified fraction.

2. Determine the relative frequency for the fourth class as a simplified fraction.

Consider the following frequency table representing the distribution of hourly wages for first jobs of a certain population.

Hourly Wage at First Job	
Class	Frequency
6.1–7.1	2
7.2–8.2	9
8.3–9.3	9
9.4–10.4	13
10.5–11.5	9

1. Determine the cumulative frequency for the fifth class.

2. Determine the cumulative frequency for the third class.