

A
Name Key
Date 1/1

~~33~~
33

Illowsky – Chapt. 1
Larson – Chapt. 1

Determine whether the data set is a population or a sample.

1) The age of each employee at a local grocery store +2

Population

Identify the population and the sample.

2) A survey of 2625 elementary school children found that 28% of the children could be classified as obese. +4

Pop: All elem school children

Sample: 2625 elem. school children.

Determine whether the numerical value is a parameter or a statistic. Explain your reasoning.

3) A survey of 1208 students was taken from a university with 20,000 students. +4

Statistic. Part of the 20,000
STUDENTS

Provide an appropriate response.

4) If you had to do a statistical study, would you use a sample or a population? Why? +4

Sample. Impossible/inconvenient
costly to use pop.

Determine whether the data are qualitative or quantitative.

5) the colors of automobiles on a used car lot +2

Qualitative

For problems 6 and 7, identify the data set's level of measurement.

6) the nationalities listed in a recent survey (for example, Asian, European, or Hispanic). +2

Nominal

7) number of pages in your statistics book

Ratio

+2

Provide an appropriate response.

8) Explain why data expressed with the Celsius temperature scale is at the interval level of measurement rather than the ratio level.

In heront "0"

+3

Determine whether the study is an observational study or an experiment.

9) A medical researcher obtains a sample of adults suffering from diabetes. She randomly assigns 67 people to a treatment group and 67 to a placebo group. The treatment group receives a medication over a period of three months and the placebo group receives a placebo over the same time frame. At the end of three months the patients' symptoms are evaluated.

Experiment

+2

Identify the sampling technique used.

10) An Allan Hancock college student interviews everyone in a statistics class to determine the percentage of students that own a car.

Convenience

+2

11) Every fifth person boarding a plane is searched thoroughly.

Systematic

+2

Provide an appropriate response.

12) Explain the differences between cluster sampling and stratified sampling.

Stratified A sample from each of the groups

cluster Not from ² each of the groups

+4