

QUESTION: 1

In a study about political preferences, a researcher randomly selected an equal number of men and women to survey.

Answer: Is the study observational or experimental? If it is an experiment, what is the controlled factor?

Answer: The study is an observational study.

QUESTION: 2

A survey was given where students in a class were asked to state their eye color. What is the level of measurement of the data?

Answer: Nominal

QUESTION: 3

Matthew wants to estimate the mean height of clients attending his store. He records the heights of 100 randomly selected clients attending the store. What is the population?

Answer: all the clients attending the store

QUESTION: 4

To study the eating habits of all athletes in his school, Christopher obtains a list of the athletes, divides the list into 5 groups, and collects data from several of these groups. Which type of sampling is used?

Answer: Stratified sampling

QUESTION: 5

In order to study the mean blood pressure of people in his town, Richard samples the population by dividing the residents by age and randomly selecting a proportionate number of residents from each age group. Which type of sampling is used?

Answer: Stratified sampling

QUESTION: 6

A small startup company wishes to know how many hours, per week, that its employees spend commuting to and from work. The number of hours for each employee are shown below. Construct a frequency table for grouped data using four classes.

17, 2, 19, 14, 13, 21, 21, 9, 17, 10, 3, 12, 15, 10, 15, 8, 5, 21, 17, 13

Answer:

Lower Class Limit	Upper Class Limit	Frequency
2	6	3
7	11	4
12	16	6
17	21	7

QUESTION: 7

The frequency table below shows the ages of the students in an astronomy class.

Complete the Relative Frequency column of the table. Enter Answer as an simplified fraction.

Answer:

Age	Frequency	Relative Frequency
17	6	6/50
18	5	5/50
19	12	12/50
20	15	15/50
21	8	8/50
22	4	4/50

QUESTION: 8

A group of students were surveyed about the number of times they went to a movie theater last year. Their responses are summarized in the relative frequency table below.