Students in an introductory statistics course were asked whether they worked at a job in addition to attending school. The following responses were given:

What proportion of the students in the class worked at a part-time job?

Leave your answer as a fraction.

Please choose the correct answer from the following choices, and then select the submit answer button.

Answer choices

42/58

16/100

16/58

16/42

Hint: Divide the number of students who work part-time by the total number of students in the class and leave as a fraction

–

A variable that places a case into one of several groups is called a/an \_\_\_\_\_\_\_\_\_ variable.

quantitative

categorical

individual

numerical

–

A(n) \_\_\_\_\_\_\_ variable is one that takes numerical values, and for which arithmetic operations, such as averaging, make sense.

Please choose the correct answer from the following choices, and then select the submit answer button.

Answer choices

qualitative

quantitative

categorical

case

–

The distribution of a categorical variable as displayed by a bar chart lists the categories and gives either the count or the \_\_\_\_\_\_\_\_\_\_\_ of cases that fall in each category.

residual

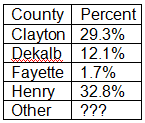
percent

bars

slices

–

Students in an introductory statistics course were asked what county they lived in. The following responses were given:



What number should replace "???" in the given table?

24.1%

Cannot be determined

29.3%

67.2%

–

A professor collects information on students in her statistics course at Swarthmore. She records the students' majors, the number of books they read last semester and whether or not they owned a pet. In this context, the data about each student's major is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

a quantitative variable

a categorical variable

not a variable

This can be interpreted as either a categorical variable or a quantitative variable based on the context in which it is used

–

Airport administrators take a sample of airline baggage and record the weight of each bag in order to estimate the number of bags that weigh more than 75 pounds. What is the variable of interest?

Date and time

Weight of the bags

Each piece of baggage

The airport administrators

–

One reason that results from random samples can be trusted is that the process \_\_\_\_\_\_\_\_\_\_.

Please choose the correct answer from the following choices, and then select the submit answer button.

Answer choices

eliminates bias in how the sample was selected <- correct

will guarantee results are totally free from bias

will create a sample that includes all important subgroups of interest

creates a sample that mirrors the population

(hint: Actually, depending on the relationship between the sample size and population size, this may not be true. If you selected a simple random sample of size 50 from your school, it is possible (but not very likely) that only one gender would be included.)

–

The process of drawing conclusions about a population on the basis of sample data is called \_\_\_\_\_.

Inference

–

The National Survey of Student Engagement (NSSE) regularly surveys freshmen and seniors at colleges and universities about their experiences both in and out of the classroom. Random samples from participating schools are selected, then students are asked and encouraged to complete the survey, but are not mandated to. The results will certainly have \_\_\_\_\_\_\_\_\_\_.

no bias

Correct: nonresponse bias

wording bias

voluntary response bias

–

Which type of sampling methods was used to select a group of students who will be able to enroll in a very popular course by lottery?

Please choose the correct answer from the following choices, and then select the submit answer button.

Answer choices

stratified sample

voluntary response sample

convenience sample

simple random sample ←

–

Sampling distributions questions

–

CI, tests, comparing two means, inference save for next week