WEEK 1: HOMEWORK

Started: Jun 18 at 6:11pm

QUIZ INSTRUCTIONS

Click the button to start the homework set. You can re-do this assignment as often as you need. Be sure to have the Week 1 Excel spreadsheet available to help with the calculations. It is provided in Week 1: Resources.

Question 1 — 2 pts

A recent survey of the alumni of a university indicated that the average salary of 10,000 of its 200,000 graduates was $130,000. The $130,000 would be considered a:

Homework Help:

1DA. Population/parameter/sample/statistic/inferential/descriptive (DOCX)

- Statistic
- Sample
- Parameter
- Population

Question 2 — 2 pts

A survey of 1050 students was taken from a university with 19,500 students. The 19,500 would be considered a:

Homework Help:

1DA. Population/parameter/sample/statistic/inferential/descriptive (DOCX)

- Parameter
- Population
- Sample
- Statistic

Question 3 — 2 pts

The average age of students in a statistics class is 28 years. The 28 years would be considered an example of:

Homework Help:

1DA. Population/parameter/sample/statistic/inferential/descriptive (DOCX)

- A population
- Qualitative data
- Descriptive statistics
- Inferential statistics

Question 4 — 2 pts

The temperature of 26 selected refrigerators would be considered:

Homework Help:

1DB. Qualitative/quantitative/nominal/ordinal/interval/ratio (DOCX)

- Interval data
- Nominal data
- Ordinal data
- Ratio data

Question 5 — 2 pts

Marriage status (married, single, etc.) of the faculty at a university would be considered:

Homework Help:

QUESTIONS

Time Elapsed: Hide

Attempt due: May 13 at 12:59am

0 Minutes, 31 Seconds

1DB. Qualitative/quantitative/nominal/ordinal/interval/ratio (DOCX)

- Qualitative data
- Quantitative data
- Ratio data
- Ordinal data

Question 6 — 2 pts

The nationalities (for example, Asian, European, etc.) listed in a recent survey would be considered:

Homework Help:

1DB. Qualitative/quantitative/nominal/ordinal/interval/ratio (DOCX)

- Ordinal data
- Interval data
- Nominal data
- Ratio data

Question 7 — 2 pts

Every fifth person boarding a plane is asked additional security questions. This sampling technique is called:

Homework Help:

1DC. Random/cluster/stratified/convenience/systematic (DOCX)

- Random
- Stratified
- Cluster
- Systematic

Question 8 — 2 pts

A personnel director at a large company would like to determine whether the company cafeteria is widely used by employees. She calls each employee and asks them whether they usually bring their own lunch, eat at the company cafeteria, or go out for lunch. This study design would be considered:

Homework Help:

1DD. Observational/experiment/simulation/survey (DOCX)

- Simulation
- Observational
- Experimental
- Survey

Question 9 — 2 pts

Which of the following would be the mean of this data set: 5, 28, 12, 56, 4, 2, 30, 21

Homework Help:

1VA. Calculating mean/standard deviation/variance (population and sample) (2:57)

1DE. Mean/median/mode/right skewed/left skewed/normal (DOCX)

- 18.24
- 19.75
- 16.50
- 17.06

Question 10 — 2 pts

Which of the following would be the standard deviation of this sample data set: 67, 54, 17,

77, 92, 41, 75, 81

Homework Help:

1VA. Calculating mean/standard deviation/variance (population and sample) (2:57)

1DF. Range/variance/standard deviation (population and sample) and shape of distribution, examples (DOCX)

- 22.9
- 525.2
- 24.5
- 600.3

Question 11 — 2 pts

Which of the following would be the variance of this population data set: 3, 6, 8, 9, 4, 5, 7, 1, 9, 7, 5, 4, 3, 1

Homework Help:

1VA. Calculating mean/standard deviation/variance (population and sample) (2:57)

- 7.05
- 6.55
- 2.56
- 2.66

Question 12 — 2 pts

What is the relationship between variance and standard deviation?

Homework Help:

1VA. Calculating mean/standard deviation/variance (population and sample) (2:57)

1DF. Range/variance/standard deviation (population and sample) and shape of distribution, examples (DOCX)

- Standard deviation is the square root of the variance
- Variance is the square root of the standard deviation
- Variance is four times the standard deviation
- Standard deviation is four times the variance

Question 13 — 2 pts

If data set A has a larger standard deviation than data set B, what would be different about their distributions?

Homework Help:

1VB. Data distribution comparisons of means and standard deviations, examples (3:01)

1DF. Range/variance/standard deviation (population and sample) and shape of distribution, examples (DOCX)

- Data set A would have a larger mean
- Data set A would have flatter distribution with more data in each tail
- Data set A would have more data near the center of the distribution
- Data set A would have most of its data to one side of the distribution

Question 14 — 2 pts

In a normally distributed data set a mean of 55 where 95% of the data fall between 47.4 and 62.6, what would be the standard deviation of that data set?

Homework Help:

1VC. Empirical rule definitions and calculations (4:56)

1DG. Standard scores and Empirical Rule definitions and calculations (DOCX)

- 3.8
- 1.9
- 5.7
- 7.6

Question 15 2 pts

Which of the following data sets would you expect to have the highest standard deviation?

Homework Help:

1DF. Range/variance/standard deviation (population and sample) and shape of distribution, examples (DOCX)

- The number of phones a person owns
- Amount of soda in an unopened can (in ounces)
- Ages of people taking college classes (in years)
- Weight of an orange (in ounces)

Question 16 2 pts

Which data outcome of the speed of cars would best support installing a speed bump?

Homework Help:

1DF. Range/variance/standard deviation (population and sample) and shape of distribution, examples (DOCX)

- High mean with high standard deviation
- Low mean with high standard deviation
- High mean with small standard deviation
- Low mean with small standard deviation

Question 17 2 pts

In manufacturing, stratified sampling could be used to determine if the machines are operating correctly. Which of the following best describes this type of sampling?

Homework Help:

1DC. Random/cluster/stratified/convenience/systematic (DOCX)

- Products are put into groups and some are randomly selected from each group
- Every 10th product in the line is selected
- Products are put into groups and all are included from several randomly selected groups
- Samples are randomly selected throughout the day

Question 18 2 pts

A graph shows vertical bars with the number of data points on the y-axis and groups on the x-axis. This graphic is most likely to be:

Homework Help:

1VD. Graphs: histogram, circle graphs, scatter plots in Excel (3:21)

1DH. Graphs: histogram, frequency polygon, stem-leaf plot, dot plot, bar chart (DOCX)

- A frequency histogram
- A dot plot
- A frequency polygon
- A stem-leaf plot

Question 19 2 pts

Match the terms and their definitions

Homework Help:

1VD. Graphs: histogram, circle graphs, scatter plots in Excel (3:21)

1DA. Population/parameter/sample/statistic/inferential/descriptive (DOCX)

1DB. Qualitative/quantitative/nominal/ordinal/interval/ratio (DOCX)

1DC. Random/cluster/stratified/convenience/systematic (DOCX)

1DH. Graphs: histogram, frequency polygon, stem-leaf plot, dot plot, bar chart (DOCX)

Vertical bar chart that shows frequency on the y-axis	[Choose]
A sample where the population is divided into groups and several groups are randomly selected from all from those selected groups are sampled	[Choose]
Collection of all counts that are of interest	[Choose]
A subset or part of a population	[Choose]
A sample where the population is divided into groups and several are randomly sampled form each group	[Choose]
Consists of attributes, labels, or nonnumerical entries	[Choose]

Question 20

2 pts

Match the terms and their definitions

Homework Help:

1DE. Mean/median/mode/right skewed/left skewed/normal (DOCX)

1DF. Range/variance/standard deviation (population and sample) and shape of distribution, examples (DOCX)

1DG. Standard scores and Empirical Rule definitions and calculations (DOCX)

The most frequent number appearing in a dataset	[Choose]
The average	[Choose]
The percentage of data that falls within 1, 2, or 3 standard deviations of the mean in a symmetrical, bell-shaped distribution	[Choose]
The square root of the variance	[Choose]
Show how far a particular data point is from the mean in terms of the number of standard deviations	[Choose]

Top

Quiz saved at 6:12pm

Submit Quiz