

Question

You conduct a hypothesis test and you observe values for the sample mean and sample standard deviation when $n = 25$ that do not lead to the rejection of H_0 . You calculate a p-value of 0.0667. What will happen to the p-value if you observe the same sample mean and standard deviation for a sample $n > 25$?

Answer

decrease

Question

For the chi-square test to be effective, the expected value for each cell in the contingency table has to be at least

Answer

5

Question

For t distribution, increasing the sample size, the effect will be on

Answer

All the options

Question

If we reject the null hypothesis, we might be making

Answer

Type I Error

Question

In a regression, that the standard error of the regression is, the greater the accuracy of the prediction will be

Answer

Smaller

Question

A residual is defined as

Answer

$(Y - \widehat{Y})$

Question

In regression analysis, the variable that is used to explain the change in the outcome of an experiment, or some natural process, is called

Answer

all of the above (a-c) are correct

Question

The regression line is drawn so that:

Answer

The sum of the squared errors is as small as possible

Question

The percent of total variation of the dependent variable Y explained by the set of independent variables X is measured by

Answer

Coefficient of Determination

Question

If the coefficient of determination is 0.81, the correlation coefficient

Answer

could be either $(+ 0.9$ or $- 0.9)$

Question

Suppose men always married women who were 10 percent shorter than they were. The correlation coefficient of the heights of married couples would be

Answer

1.0 since the height of the man is always predictable from the height of the woman

Question

We measure heights and weights of 100 twenty-year old male college students. Which

will have the higher correlation

Answer

Both will have the same correlation

Question

Suppose the correlation coefficient between heights (as measured in feet) versus weight (as measured in pounds) is 0.40. What is the correlation coefficient of height measured in inches versus weight measured in ounces? [12 inches = one foot; 16 ounces = one pound]

Answer

0.4

Question

An investigator is studying the relation between the physical and intellectual growth of primary school children (grades 1-6). At each grade level, she notes that the correlation between the height of children and the size of their vocabulary is zero. For all students in the school, the correlation is likely to be

Answer

Positive

Question

A summary measure that describes any given characteristic of the population is known as a _____

Answer

Parameter

Question

A _____ sample is formed by selecting one unit at random and then selecting additional units at evenly spaced intervals until the sample has been formed

Answer

Systematic

Question

Laspeyres index numbers possess _____

Answer
Upward bias

Question
Most commonly used index number is_____

Answer
None

Question
Investor wishing to invest N100,000 in one of three possible investment alternatives, A, B, and C is an example of

Answer
Decision making under uncertainty

Question
The mean of a distribution is 23, the median is 24, and the mode is 25.5. It is most likely that this distribution is:

Answer
Negatively Skewed

Question
The mean of a distribution is 14 and the standard deviation is 5. What is the value of the coefficient of variation?

Answer
0.357

Question
The mean deviation of the series $(a, a + d, a + 2d \dots + 2n)$ from its mean is

Answer
 $n(n+1)d/2n+1$

Question

A student obtained the mean and the standard deviation of 100 observations as 40 and 5.1. It was later found that one observation was wrongly copied as 50, the correct figure being 40. Find the correct mean and the S.D

Answer

Mean = 39.9, S.D = 5

Question

For a negatively skewed distribution, the correct inequality is _____

Answer

Mean

Question

What percentage of values is greater than the 3rd quartile?

Answer

0.25

Question

Which of the following is a unitless measure of dispersion?

Answer

Coefficient of variation

Question

Individual data is another way called as _____

Answer

raw data

Question

The data given as 5, 7, 12, 17, 79, 84, and 91 will be called as _____

Answer

An individual series

Question

Which of the following example does not constitute an infinite population?

Answer

Population of heights of 15 year old children.

Question

In a web-based survey, customers are asked to rate your company's product on the following scale: Excellent, good, average, poor. The above scale is

Answer

ordinal

Question

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