**Statistics and Probability (STAT-112)**

**Grade11 Week 1-10**

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Which of the following statement is TRUE.

Select one:

a. All of the statements are TRUE.

b. Countable number of values are called discrete variables

c. Non-countable values are called discrete variables

d. Infinite numbers are considered discrete variables.

Answer: Countable number of values are called discrete variables

Question 2

The speed of cars travelling in the road and the water consumption of household are examples of

Select one:

a. Discrete Continuous Random Variable

b. Continuous Discrete Random Variable

c. Continuous Random Variable

d. Discrete Random Variables

e. None of the choices

Answer: Continuous Random Variable

Question 3

True or False: The number of questions that you answer correctly on this quiz is an example of a discrete random variable.

Answer:

false

Question 4

Which of the following is incorrect?

Select one:

a. Probability distribution equals to one.

b. Probability distribution equals to zero.

c. Probability distribution is used to compute discrete random variables

d. None of the choices

e. Probability distribution is used to compute continuous random variables

Answer: Probability distribution equals to zero.

Question 5

What is the probability distribution of occurring the all heads in a toss of three coins?

Select one:

a. 0.1255

b. 0.25

c. 1

d. None of the choices

e. 0

Answer: 0.1255

Short Quiz 1

Which of the following is CORRECT about Sample Space

Select one:

a. Sample space is also known as probability mass function.

b. Sample space is a subset of events.

c. Sample space should be always be a number from zero to one.

d. Sample space are possible outcomes

Answer: Sample space are possible outcomes

The sum of all the probabilities P(X = x) for all possible values of a discrete random variable X must equal to \_\_\_\_\_

Answer: 1

How many possible outcomes when you simultaneously toss three fair coins.

Answer: 8

Salary, scores and age are examples of answer: continuous.. random variables

Which one of these variables is a not continuous random variable?

Select one:

a. The number of attendees in an Information Technology conference.

b. The tuition fee enrolled in different universities

c. The number of volunteers in a community

d. The number of senators elected in the Philippines

Answer: The number of senators elected in the Philippines

Countless number of values are also known as Answer continuous.. variables.

Which of the following random activity would you define as a discrete random variable?

Select one:

a. Distance travelled of a tourist bus.

b. Depth of building excavation.

c. None of the choices.

d. Height of students enrolled in an online course.

e. Wind speed during typhoon.

Answer: None of the choices.

The sum of all the probabilities P(X = x) for all possible values of a discrete random variable X must equal 1.

Select one:

a. The statement is NOT ALWAYS FALSE

b. The statement is TRUE.

c. The statement is FALSE.

d. The statement is NOT ALWAYS TRUE

Answer: The statement is TRUE.

A continuous random variable assigns a whole number to each possible outcome of an experiment.

Select one:

a. None of the choices

b. The statement has insufficient information.

c. True

d. False

Answer: True

This tells what the possible values of X and how probabilities are assigned to these values.

Answer: Probability Distribution

Week3 Stats

WEEK 3

Learning Activity 3 AND SHORT QUIZ 3

It is the measure of how many standard deviations below or above the population mean.

Select one:

a. Median

b. Z-score

c. Normal Distribution Measurement

d. Empirical Rule

Feedback

The correct answer is: Z-score

In an IT Certification Examination, the mean was 75 and the standard deviation was 5. If Pam z-scored is 1.5, what was her score in the examination?

Select one:

a. 117.50

b. 487.50

c. None of the choices

d. 82.50

Feedback

The correct answer is: 82.50

Who is the famous mathematician where the normal distribution curve was named after?

Select one:

a. Carl Friedrich Gauss

b. William Gosset

c. Ronald Fisher

d. John Tukey

Feedback

Your answer is correct.

The correct answer is: Carl Friedrich Gauss

Which of the following is not a characteristics of a normal distribution.

Select one:

a. Mount-shaped distribution

b. Bell-shaped

c. None of the choices

d. Perfectly asymmetric

Feedback

The correct answer is: Perfectly asymmetric

How many regions can be found at the left side of the normal distribution curve?

Select one:

a. 3

b. 2

c. 4

d. 1

Feedback

The correct answer is: 3

Short Quiz 3

In a normal distribution curve,

Select one:

a. Mean is equal to Median and Mode

b. None of the choices

c. Mean is equal to Mode

d. Mean is equal to Median

Feedback

The correct answer is: Mean is equal to Median and Mode

It is the measure of how many standard deviations below or above the population mean.

Select one:

a. Empirical Rule

b. Median

c. Z-score

d. Normal Distribution Measurement

Feedback

The correct answer is: Z-score

Given the set of data:

1, 1, 2, 2, 3, 3, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22

Find the lower quartile

Select one:

a. 8

b. 3,4,5,6,7,8,9,10,11,12,

c. 3

d. 0

Feedback

The correct answer is: 8

In an IT Certification Examination, the mean was 50 and the standard deviation was 3. If Pam z-scored is 1, what was her score in the examination?

Select one:

a. 53.00

b. None of the choices

c. 80.50

d. 82.50

Feedback

The correct answer is: 53.00

Assuming z-score is -1, which of the following statement is TRUE.

Select one:

a. All values are greater than the mean.

b. All values are less than the mean.

c. All values are equal to the mean.

d. All values are equal to the z-score

Feedback

The correct answer is: All values are less than the mean.

Given the set of data:

1,1, 2, 2, 3, 3, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22

Find the upper quartile

Select one:

a. 13,14,15,14,15,16,17,18,19,20,21,22

b. 18

c. 22

d. 0

Feedback

The correct answer is: 18

Find the median of the following data set.

11, 13, 15, 17, 19, 21, 22, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 51, 53, 55, 57, 59

Select one:

a. 36.45

b. 24

c. 30

d. 31

Feedback

The correct answer is: 31

Given the set of data:

1,1, 2, 2, 3, 3, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22

How many numbers are in the lower quartile?

Select one:

a. 0

b. 10

c. 6

d. 3,4,5,6,7,8,9,10

Feedback

The correct answer is: 6

Normal Distribution Curve is also called

Select one:

a. Arc-Shaped Curve

b. Bell Curve

c. Basic Curve

d. All of the choices

Feedback

The correct answer is: Bell Curve

In a normal distribution curve, data are divided into 3 equal parts.

Select one:

a. The statement is TRUE.

b. None of the choices

c. The statement is FALSE.

d. The statement is SOMETIMES TRUE depending on the data set.

Feedback

The correct answer is: None of the choices  
Week 5 Stats

Learning Activity 4

True or False: Variance Error is the difference between a sample statistic used to estimate a population parameter and the actual but unknown value of the parameter

The correct answer is: FALSE

True or False: Sampling Error is the degree of error expected for a given sample design

The correct answer is: TRUE

Identify whether each example describes a random sample. Answer with Yes or No.

The correct answer is: No

Given the following sample data, compute for the true mean. The answer must have two decimal places.

1 1 1 2 3 4 5 5 5 8 8 8 8

The correct answer is: 4.53

Given the following mean, compute for the Mean of Means. The answer must have two decimal places.

4.5, 9.2, 9.1, 8.4

The correct answer is: 2.60

Week 5 Stats short quiz 4

Short Quiz 4

Identify whether each example describes a random sample. Answer with Yes or No

Renmel closes his eyes, opens a book and randomly points to a word on the page. She repeats the process for 30 times.

The correct answer is: No

True or False: Mean of means is the sum of all means multiplied by the number of means

The correct answer is: FALSE

It is a part of population intended to represent a population as a whole.

Select one:

a. Mode

b. Deviation Error

c. Parameter

d. Standard deviation of the distribution of the sample means

e. Random Sample

f. Mean

g. Sampling Error

h. Population Mean

i. Median

j. Statistics

k. Distribution Error

l. Sample Distribution of sample means

m. Standard Curve

n. Sample

o. Standard Deviation

p. Sample

q. Population

The correct answer is: Sample

Identify whether each example describes a random sample. Answer with Yes or No

Women who volunteer to take a survey on human rights.

The correct answer is: No

The distribution that describes the spread of the means of multiple samples from the sample population

Select one:

a. Deviation Error

b. Parameter

c. Sample

d. Standard Deviation

e. Distribution Error

f. Population

g. Random Sample

h. Mode

i. Sampling Error

j. Population Mean

k. Mean

l. Statistics

m. Median

n. Standard deviation of the distribution of the sample means

o. Sample Distribution of sample means

p. Sample

q. Standard Curve

The correct answer is: Sample Distribution of sample means

Identify whether each example describes a random sample. Answer with Yes or No.

Each audience in a game show is assigned a number from 111 to 666 and roll three standard dice to choose random contestants.

The correct answer is: Yes

If the standard deviation of a population is 300, and samples of 25 units each are taken, what is the Standard deviation of the distribution of the sample means?

The correct answer is: 60

Given the following sample data, compute for the true mean. The answer should be rounded off to one decimal place.

3 5 5 5 6 6 8 8 13 15 17 30

The correct answer is: 10.8

True or False: People whose names were drawn out of the survey is an example of a random sample

The correct answer is: TRUE

True or False: As the sample size increases, the standard error increases.

The correct answer is: FALSE  
Learning Activity 6 Stats

To calculate the mean from a sample,

Select one:

a. Get the half of the sum of the all the values

b. Add all the values and divided by the total number of samples

c. Divide each value with the sum of all values

d. None of the choices

The correct answer is: Add all the values and divided by the total number of samples

Compute for the point estimate of the population parameter. Round off your answer to the nearest hundredths or has two decimal places. Write the measurement at the end of the answer.

Average Speed of a car Car 1 Car 2 Car 3 Car 4

80 kph 75 kph 60 kph 66 kph

The correct answer is: 7 0 . 2 5 k p h

This is defined by two values, between which a population parameter is said to lie.

Select one:

a. Interval Estimate

b. Points Estimate

c. Coefficient Estimate

d. Point to point Estimate

The correct answer is: Interval Estimate

Compute for the point estimate of the population parameter. Round off your answer to the nearest hundredths or has two decimal places, if necessary.

Scores of students in quizzes

The correct answer is: 77.70

Compute for the point estimate of the population parameter of the grades of students. (Round off your answer to the nearest hundredths.)

The correct answer is: 85.75

Point estimate is

Select one:

a. none of the choices

b. always equal to the mean

c. used to estimate population parameter Correct

d. the number of samples

e. a range of possible values of population mean

Feedback

The correct answer is: used to estimate population parameter

A single value given as an estimate of a parameter of a population.

Select one:

a. Sample distribution Incorrect

b. Confidence Limit

c. Confidence coefficient

d. Sample Mean

Feedback

The correct answer is: Sample Mean

Short Quiz 6 Stats

Confidence interval is associated by confidence level

Select one:

a. TRUE

b. FALSE

The correct answer is: TRUE

The effectiveness of the sample android application can be measured by the proportion of mobile users who install the application. To determine this proportion for a specific android app, the distributed to 500 users and 450 user install the app. The point estimate is \_\_\_\_\_\_\_\_\_\_\_\_.

Select one:

a. .85

b. .80

c. .90

d. .95

The correct answer is: .90

Which measure of tendency is the best estimator?

Select one:

a. Mode

b. Mean

c. Standard Deviation

d. Median

The correct answer is: Mean

Confidence level indicates the level of assurance that confidence interval encloses the:

Select one:

a. unknown population mean

b. biased sample

c. known population mean

d. unbiased sample

The correct answer is: unknown population mean

Which of the following applies to confidence interval

Select one:

a. Confidence interval is used to the true mean of population

b. As the confidence interval for a given statistic increases in length, the confidence level increases

c. Confidence interval is associated by confidence level

d. None of the choices

e. All of the choices

The correct answer is: All of the choices

A 95% confidence interval means 95% of all samples of size n would fall \_\_\_\_\_\_ our confidence interval

Select one:

a. Below

b. Outside

c. None of the choices

d. Within

e. Above

Feedback

The correct answer is: Within

You need to calculate for the confidence interval for the population mean. The population standard deviation is known. There are 50 sample observations. You will use 95 percent level of confidence. The appropriate value of z is:

Select one:

a. Cannot be determined

b. 1.64

c. 2.58

d. 1.96

e. 1

The correct answer is: 1.96

Point estimate is always equal to the sampling coefficient.

Select one:

a. FALSE. Change the statement to “Point estimate is equal to the number of samples”

b. FALSE. Change the statement to “Point estimate is used to estimate population parameter”

c. TRUE

d. FALSE. Change the statement to “Point estimate is a range of possible values of population mean”

The correct answer is: FALSE. Change the statement to “Point estimate is a range of possible values of population mean”

Confidence coefficient is a single value given as an estimate of a parameter of a population.

Select one:

a. TRUE

b. FALSE. Change “confidence coefficient” to confidence limit

c. FALSE. Change “confidence coefficient” to sample mean

d. FALSE. Change “confidence coefficient” to Confidence Limit

The correct answer is: FALSE. Change “confidence coefficient” to sample mean

The confidence level is expressed as a fraction

Select one:

a. FALSE

The correct answer is: FALSE  
Short Quiz 8

The “p hat” is calculated as

Select one:

a. Number of desired elements over the number of desired outcomes

b. Number of desired outcomes over the number of desired elements Correct

c. 1- (Number of desired elements over the number of desired outcomes)

d. (Number of desired outcomes over the number of desired elements) – 1

Feedback

The correct answer is: Number of desired outcomes over the number of desired elements

Sampling distribution of proportions is \_\_\_\_\_\_\_\_\_\_\_\_\_\_ distributed

Select one:

a. Normally Correct

b. Randomly

c. Evenly

d. Unevenly

Feedback

The correct answer is: Normally

A survey was conducted to 300 Grade 10 students who have Internet access to determine who access social media websites after attending classes. Based on the survey, 250 students responded Yes. What is the population proportion to students who do not access social media after attending classes?

Select one:

a. 80%

b. 20%

c. 17% Correct

d. 83%

Feedback

The correct answer is: 17%

When the confidence level is 95%, the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are +- 1.96

Select one:

a. Margin of Errors

b. Confidence coefficients Correct

c. Confidence intervals

d. “p hat” values

Feedback

The correct answer is: Confidence coefficients

Point estimate is

Select one:

a. Always equal to the number or samples

b. A range of possible values for a population parameter.

c. Equal to the population mean

d. A statistical that estimates a population parameter Correct

Feedback

The correct answer is: A statistical that estimates a population parameter

The ^p is the \_\_\_\_\_\_\_\_\_\_\_\_ estimate of p.

Select one:

a. balanced

b. unbiased Correct

c. biased

d. inverse

Given n=10, x¯ =28, s=2.0, 95% confidence. Assuming that the samples come from a normal distribution, find the margin of error.

Select one:

a. 1.24 Correct

b. 26.76

c. 3.16

d. 0.63

Feedback

The correct answer is: 1.24

Given n=10, x¯ =28, s=2.0, 99% confidence. Assuming that the samples come from a normal distribution, find the interval estimate of the population mean.

Select one:

a. (11.34, 14.89)

b. (1.63, 2.25)

c. (21.36, 24.63)

d. (26.36, 29.63) Correct

Feedback

The correct answer is: (26.36, 29.63)

What is in the center of the confidence interval?

Select one:

a. Margin of Error

b. Point Estimate Correct

c. Population Parameter

d. Number of samples

Feedback

The correct answer is: Point Estimate

In a survey of 500 individuals, 300 likes to eat dinner in a restaurant. Estimate the sample proportion ^p of those who like to eat dinner in a restaurant based on the sample.

Select one:

a. 45%

b. 0.40

c. 55%

d. 0.60 Correct

Feedback

The correct answer is: 0.60

Learning Activity 8 Stats

Margin of error is

Select one:

a. the product of confidence coefficient and standard deviation divided by the square root of the sample size Correct

b. the quotient of confidence coefficient and standard deviation multiplied by the square root of the sample size

c. the product of confidence coefficient and square root of the sample size divided by standard deviation

d. the quotient of confidence coefficient and square root of the sample size divided standard deviation

Feedback

The correct answer is: the product of confidence coefficient and standard deviation divided by the square root of the sample size

Given n=100, x¯ =45, s=2.0, 90% confidence. Assuming that the samples come from a normal distribution, find the interval estimate of the population mean.

Select one:

a. (42.103, 43.970)

b. (43.355, 46.645)

c. (44.461, 45.329) Incorrect

d. (46.921, 47.727)

Feedback

The correct answer is: (43.355, 46.645)

Given n=100, x¯ =80, s=2.0, 95% confidence. Assuming that the samples come from a normal distribution, find the margin of error.

Select one:

a. 0.348 Incorrect

b. 0.20

c. 0.392

d. 0.196

Feedback

The correct answer is: 0.392

A survey was conducted from the 250 individuals. Based on the result of the survey, 170 are satisfied with the current Local Government administration. Estimate the sample proportion ^p of those who are not satisfied based on the sample provided.

Select one:

a. 55%

b. 0.32 Correct

c. 0.

d. 0.68

Feedback

The correct answer is: 0.32

A survey was conducted to 110 college students to determine who are using the Library Resource Center of the university. Based on the survey, only 30% responded Yes. Based on the survey, how many students are not using the Library Resource Center?

Select one:

a. 33

b. 30

c. 67 Correct

d. 70

Feedback

The correct answer is: 67

Learning Activity 9 Stats

A survey of 200 people finds that they work on average of 8 hours a day. If the margin of error at 98% confidence level is 1.2 hours. How do you compute for the lower confidence interval?

Select one:

a. 8 hours less 1.2 hours

b. Z score plus less the square root of 8 hours less 1.2 hours Correct

c. None of the choices

d. 8 hours less 1.2 hours multiplied by the z score at 98% confidence level

Feedback

The correct answer is: Z score plus less the square root of 8 hours less 1.2 hours

King Lo Electronics claims that the new brand of computer will last for 25,000 hours. A research company conducted a test on the information. The company randomly select and test 100 cellular phone. The data from the sample shows that the mean life of the cellular phone is 20,000 hours, with a standard deviation of 1000 hours. Determine the 95% confidence interval of the mean life of the cellular phone.

Select one:

a. (17,482, 18,649)

b. (19,804, 20,196) Correct

c. (23,467, 24,639)

d. (26,928, 27,375)

Feedback

The correct answer is: (19,804, 20,196)

Given the sample size (n=400) and sample proportion (p=0.56), find the approximate margin of error for the 99% confidence interval:

Select one:

a. 0.043 Incorrect

b. 0.052

c. 0.064

d. 0.074

Feedback

The correct answer is: 0.064

Given the sample size (n=200) and sample proportion (p=0.70), find the approximate margin of error for the 90% confidence interval:

Select one:

a. 0.053

b. 0.085

c. 0.072 Incorrect

d. 0.039

Feedback

The correct answer is: 0.053

A private organization telephone poll of 750 adults, aged 18 and older, living in the country found that 60% of citizen feel confident in the accuracy of their doctor's advice, and don't feel the need to check for a second opinion or do additional research. The margin of error for this survey was given as ± 20 percentage points. Find a 95% confidence interval estimate of the percent of adults who feel confident in the accuracy of their doctor’s advice and don’t feel the need to check for a second opinion.

Select one:

a. (0.490, 0.601)

b. (0.452, 0.538)

c. (0.565, 0.640) Correct

d. (0.316, 0.483)

Feedback

The correct answer is: (0.565, 0.640)

Short Quiz 9

Given the sample size (n=400) and sample proportion (p=0.70), find the approximate margin of error for the 99% confidence interval:

Select one:

a. 0.086

b. 0.059

c. 0.039 Incorrect

d. 0.330

Feedback

The correct answer is: 0.059

Suppose a new cancer treatment is given to a sample of 500 patients. The treatment was successful for 300 of the patients. Assume that these patients are representative of the population of individuals who have this cancer.

Determine a 90% confidence interval for the proportion successful treated.

Select one:

a. 0.564 < p < 0.640

b. 0.640 < p < 0.742 Incorrect

c. 0.742 < p < 0.834

d. 0.834 < p < 0.927

Feedback

The correct answer is: 0.564 < p < 0.640

A private organization telephone poll of 900 adults, aged 18 and older, living in the country found that 75% of citizen feel confident in the accuracy of their doctor's advice, and don't feel the need to check for a second opinion or do additional research. The margin of error for this survey was given as ±10 percentage points.

Find a 90% upper confidence interval estimate of the percent of adults who feel confident in the accuracy of their doctor’s advice and don’t feel the need to check for a second opinion.

Select one:

a. 0.077

b. 0.329 Incorrect

c. 0.834

d. 0.290

Feedback

The correct answer is: 0.077

Lim Electronics claims that the new brand of cellular phone will last for 80,000 hours. A research company conducted a test on the information. The company randomly select and test 100 cellular phone. The data from the sample shows that the mean life of the cellular phone is 60,000 hours, with a standard deviation of 1500 hours. Determine the 95% confidence interval of the mean life of the cellular phone.

Select one:

a. (79,301 , 80,890) Incorrect

b. (59,706 , 60,294)

c. (59,301 , 60,890)

d. (79,706 , 80,294)

Feedback

The correct answer is: (59,706 , 60,294)

A survey of 900 female finds that they sleep on average of 8 hours a day. If the margin of error at 95% confidence level is 1.3 hours. Find the confidence interval?

Select one:

a. 4.50 hours < p < 5.89 hours

b. 6.70 hours < p < 9.30 hours Correct

c. 8.66 hours < p < 11.26 hours

d. 7.34 hours < p < 8.66 hours

Feedback

The correct answer is: 6.70 hours < p < 9.30 hours

Given the sample size (n=300) and sample proportion (p=0.56), find the approximate margin of error for the 90% confidence interval:

Select one:

a. 0.055

b. 0.069

c. 0.047 Correct

d. 0.039

Feedback

The correct answer is: 0.047

Given the problem in item 9, what does the answer tells about?

Select one:

a. Lim Electronics can use the survey conducted for their advertisements.

b. The confidence interval does not support the claim of Lim Electronics.

c. The confidence interval support the claim of Lim Electronics. Incorrect

d. The information is not sufficient to conclude.

Feedback

The correct answer is: The confidence interval does not support the claim of Lim Electronics.

A survey of 900 people finds that they work on average of 9 hours a day. If the margin of error at 98% confidence level is 1.5 hours. What is the solution to find the lower confidence interval?

Select one:

a. Z score plus less the square root of 9 hours less 1.5 hours

b. None of the choices

c. 9 hours less 1.5 hours Correct

d. All of the choices

e. 9 hours less 1.5 hours multiplied by the z score at 98% confidence level

A private organization telephone poll of 900 adults, aged 18 and older, living in the country found that 75% of citizen feel confident in the accuracy of their doctor's advice, and don't feel the need to check for a second opinion or do additional research. The margin of error for this survey was given as ±10 percentage points.

Find a 90% lower confidence interval estimate of the percent of adults who feel confident in the accuracy of their doctor’s advice and don’t feel the need to check for a second opinion.

Select one:

a. 0.0726

b. 0.8932

c. 0.4508 Incorrect

d. 0.0934

Feedback

The correct answer is: 0.0726

Suppose a new cancer treatment is given to a sample of 500 patients. The treatment was successful for 300 of the patients. Assume that these patients are representative of the population of individuals who have this cancer.

Calculate the sample proportion that was successfully treated.

Select one:

a. 0.85 Incorrect

b. 0.72

c. 0.30

d. 0.60

Feedback

The correct answer is: 0.60  
Learning Activity 12 Stats

In hypothesis testing, the computed statistics is compared to the critical value for decision making.

Select one:

a. The statement is TRUE. Correct

b. The statement is FALSE.

Feedback

The correct answer is: The statement is TRUE.

This separates the rejection region to the region where we do not reject the null hypothesis.

Select one:

a. Z score

b. Null value Incorrect

c. Critical value

d. chi value

The correct answer is: Critical value

Given a=0.05 and the test statistics, decide whether the null hypothesis is to be rejected or accepted:

– 4

Select one:

a. Do not Reject

b. Reject Correct

c. Cannot be determined

Feedback

The correct answer is: Reject

St. Therese senior high school have an average achievement test score of 96. From a random sample of 49 students St. Therese students we find the average achievement test score to be 98 with a standard deviation of 88. We want to know if these high school students are representative of the overall population. What can we conclude based?

Select one:

a. Accept null hypothesis

b. Reject null hypothesis

c. Accept alternative hypothesis Incorrect

d. Reject alternative hypothesis

Feedback

The correct answer is: Accept null hypothesis

Given a=0.05 and the test statistics, decide whether the null hypothesis is to be rejected or accepted:

2.35

Select one:

a. Cannot be determined

b. Reject

c. Do not Reject Incorrect

Feedback

The correct answer is: Reject

Suppose that the z is the test statistics for hypothesis testing, calculate the value of the z for each of the following. Express your answer in 2 decimal places. µ = 25, s = 5, n = 80, x¯ = 23.4

Answer:

-5

Incorrect

Feedback

The correct answer is: -2.86

Suppose that the z is the test statistics for hypothesis testing, calculate the value of the z for each of the following. Express your answer in 2 decimal places. µ = 77, s = 6, n = 109, x¯ = 78.2

Answer:

-12.83

Incorrect

Feedback

The correct answer is: 2.09

Short Quiz 12

Consider the scenario: In a recent survey, 320 persons out of 35 reported that they prefer to ride in a public utility air-conditioned vehicle rather than a jeepney. What is the value of the test statistics?

Select one:

a. 3.49 Incorrect

b. – 1.85

c. – 1.85

d. – 1.33

Feedback

The correct answer is: – 1.85

Supposed that the z is the test statistics for hypothesis testing, calculate the value of the z for each of the following. Express your answer in 2 decimal places.

µ = 8.5, s = 4, n = 99, x¯ = 7.2

Answer:

34.32

Incorrect

Feedback

The correct answer is: -3.23

Given a=0.05 and the test statistics, decide whether the null hypothesis is to be rejected or accepted:

3.31

Select one:

a. Cannot be determined

b. Reject Correct

c. Do not Reject

Consider the scenario: In a recent survey, 320 persons out of 35 reported that they prefer to ride in a public utility air-conditioned vehicle rather than a jeepney.

What can we conclude based the value of the test statistics?

Select one:

a. Reject null hypothesis

b. Accept alternative hypothesis Incorrect

c. Reject alternative hypothesis

d. Accept null hypothesis

Feedback

The correct answer is: Accept null hypothesis

Values supporting the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ occurs in the rejection region.

Select one:

a. Critical values

b. Alternative hypothesis and critical values Incorrect

c. Null hypothesis

d. Null hypothesis and critical values

e. Alternative hypothesis

Feedback

The correct answer is: Null hypothesis and critical values

A sample is small when n=30.

Select one:

a. The statement is TRUE. Incorrect

b. The statement is FALSE. Replace the letter n with letter x.

c. The statement is FALSE. Replace the = with =

d. The statement is FALSE. Replace the word small with large.

Feedback

The correct answer is: The statement is FALSE. Replace the word small with large.

In hypothesis testing, the computed statistics is compared to the critical value for decision making.

Select one:

a. The statement is FALSE.

b. The statement is TRUE. Correct

Feedback

The correct answer is: The statement is TRUE.

Given a=0.05 and the test statistics, decide whether the null hypothesis is to be rejected or accepted:

0.131

Select one:

a. Do not Reject

b. Reject Incorrect

c. Cannot be determined

Feedback

The correct answer is: Do not Reject

Given a=0.05 and the test statistics, decide whether the null hypothesis is to be rejected or accepted:

1.11

Select one:

a. Cannot be determined

b. Do not Reject Correct

c. Reject

Feedback

The correct answer is: Do not Reject

Supposed that the z is the test statistics for hypothesis testing, calculate the value of the z for each of the following. Express your answer in 2 decimal places.

µ = 77, s = 6, n = 109, x¯ = 78.2

Answer:

56.23

Incorrect

Feedback

The correct answer is: 2.09

Supposed that the z is the test statistics for hypothesis testing, calculate the value of the z for each of the following. Express your answer in 2 decimal places.

µ = 8, s = 4, n = 99, x¯ = 7.2

Answer:

-1.99

Correct

Feedback

The correct answer is: -1.99

Given a=0.05 and the test statistics, decide whether the null hypothesis is to be rejected or accepted:

1.20

Select one:

a. Cannot be determined

b. Reject

c. Do not Reject Correct

Feedback

The correct answer is: Do not Reject

Given a=0.05 and the test statistics, decide whether the null hypothesis is to be rejected or accepted:

– 0.6

Select one:

a. Cannot be determined

b. Do not Reject Correct

c. Reject

Feedback

The correct answer is: Do not Reject  
Learning Activity 13 Stats

A Police Sub Station claims that 45% of crimes are related to cell phone snatching. In a random sample of 150 accidents, it is found that 60 of the accidents are related to cell phone snatching.

What is the standard error of the proportion?

Select one:

a. 0.033

b. 0.028

c. 0.066 Incorrect

d. 0.041

Feedback

The correct answer is: 0.041

A Police Sub Station claims that 45% of crimes are related to cell phone snatching. In a random sample of 150 accidents, it is found that 60 of the accidents are related to cell phone snatching.

What is the observed value of the sample proportion?

Select one:

a. 0.932

b. 0.400

c. 0.783

d. 0.600 Incorrect

Feedback

The correct answer is: 0.400

A businessman is increasing his price for processed food, claiming that the cost of labor and material is going up and accounts for 75% of his budget. In a random sample of 10 of the processed food, it is found out that in 6 of the processed food, the cost of the material is higher.

What is the standard error of the proportion?

Select one:

a. 0.442 Incorrect

b. 0.391

c. 0.137

d. 0.296

Feedback

The correct answer is: 0.137

A businessman is increasing his price for processed food, claiming that the cost of labor and material is going up and accounts for 75% of his budget. In a random sample of 10 of the processed food, it is found out that in 6 of the processed food, the cost of the material is higher.

At the 5% level of significance, test the contractor/engineer’s claim. Based on the test, what can you conclude?

Select one:

a. Reject the null hypothesis

b. Accept the null hypothesis Correct

Feedback

The correct answer is: Accept the null hypothesis

A Police Sub Station claims that 45% of crimes are related to cell phone snatching. In a random sample of 150 accidents, it is found that 60 of the accidents are related to cell phone snatching.

At the 10% level of significance, test the Police Sub Station claims. Based on the test, what can you conclude?

Select one:

a. Accept the null hypothesis Correct

b. Reject the null hypothesis

Feedback

The correct answer is: Accept the null hypothesis

A Police Sub Station claims that 45% of crimes are related to cell phone snatching. In a random sample of 150 accidents, it is found that 60 of the accidents are related to cell phone snatching.

What is the test statistic for this scenario?

Select one:

a. -0.066

b. 2.112

c. -1.231

d. 1.992 Correct

Feedback

The correct answer is: 1.992

A businessman is increasing his price for processed food, claiming that the cost of labor and material is going up and accounts for 75% of his budget. In a random sample of 10 of the processed food, it is found out that in 6 of the processed food, the cost of the material is higher.

What is the test statistic for this scenario?

Select one:

a. 0.899

b. 1.203

c. 0.996

d. 1.095 Correct

Feedback

The correct answer is: 1.095

Short Quiz 13 Stats

The traffic management office claims that 65% of road accidents are related to motorcycles. In a random sample of 200 accidents, it is found that 135 of the accidents are related to motorcycles.

At the 10% level of significance, test the traffic management office’s claim. Based on the test, what can you conclude?

Select one:

a. Accept the null hypothesis Correct

b. Reject the null hypothesis

Feedback

The correct answer is: Accept the null hypothesis

A building contractor/engineer is increasing his price for building projects, claiming that the cost of labor and material is going up and accounts for 65% of his budget. In a random sample of 30 of his projects it is found that in 20 of the projects the cost of the material is higher.

What is the test statistic for this scenario?

Select one:

a. 0.983

b. 2.181

c. 3.004

d. 1.191 Correct

Feedback

The correct answer is: 1.191

A building contractor/engineer is increasing his price for building projects, claiming that the cost of labor and material is going up and accounts for 65% of his budget. In a random sample of 30 of his projects it is found that in 20 of the projects the cost of the material is higher.

What is the standard error of the proportion?

Select one:

a. 0.087 Correct

b. 0.0632

c. 0.032

d. 0.051

Feedback

The correct answer is: 0.087

About 30% of the male population living in an urban area smokes cigarette. A researcher believes that male aged 16-30 are more likely smokes cigarette than other ages in the urban area population. The researcher surveys 300 male aged 16-30 and finds that 80 of them smokes cigarette:

What is the standard error of the proportion?

Select one:

a. 0.041

b. 0.089

c. 0.026 Correct

d. 0.011

Feedback

The correct answer is: 0.026

About 30% of the male population living in an urban area smokes cigarette. A researcher believes that male aged 16-30 are more likely smokes cigarette than other ages in the urban area population. The researcher surveys 300 male aged 16-30 and finds that 80 of them smokes cigarette:

What is the test statistic for this scenario?

Select one:

a. -2.729

b. -0.998

c. -3.661

d. -1.260 Correct

Feedback

The correct answer is: -1.260

About 30% of the male population living in an urban area smokes cigarette. A researcher believes that male aged 16-30 are more likely smokes cigarette than other ages in the urban area population. The researcher surveys 300 male aged 16-30 and finds that 80 of them smokes cigarette:

What is the observed value of the sample proportion?

Select one:

a. 0.372

b. 0.419

c. 0.267 Correct

d. 0.189

Feedback

The correct answer is: 0.267

A building contractor/engineer is increasing his price for building projects, claiming that the cost of labor and material is going up and accounts for 65% of his budget. In a random sample of 30 of his projects it is found that in 20 of the projects the cost of the material is higher.

What is the observed value of the sample proportion?

Select one:

a. 0.667 Correct

b. 0.429

c. 0.739

d. 0.921

Feedback

The correct answer is: 0.667

The traffic management office claims that 65% of road accidents are related to motorcycles. In a random sample of 200 accidents, it is found that 135 of the accidents are related to motorcycles.

What is the test statistic for this scenario?

Select one:

a. 0.0548

b. 0.0808

c. 0.0993

d. 0.0741 Correct

Feedback

The correct answer is: 0.0741

A building contractor/engineer is increasing his price for building projects, claiming that the cost of labor and material is going up and accounts for 65% of his budget. In a random sample of 30 of his projects it is found that in 20 of the projects the cost of the material is higher.

At the 5% level of significance, test the contractor/engineer’s claim. Based on the test, what can you conclude?

Select one:

a. Accept the null hypothesis Correct

b. Reject the null hypothesis

Feedback

The correct answer is: Accept the null hypothesis

The traffic management office claims that 65% of road accidents are related to motorcycles. In a random sample of 200 accidents, it is found that 135 of the accidents are related to motorcycles.

What is the observed value of the sample proportion?

Select one:

a. 0.963

b. 0.675 Correct

c. 0.367

d. 0.822

Feedback

The correct answer is: 0.675

Short Quiz 13 Stats

The traffic management office claims that 65% of road accidents are related to motorcycles. In a random sample of 200 accidents, it is found that 135 of the accidents are related to motorcycles.

At the 10% level of significance, test the traffic management office’s claim. Based on the test, what can you conclude?

Select one:

a. Accept the null hypothesis Correct

b. Reject the null hypothesis

Feedback

The correct answer is: Accept the null hypothesis

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What is the test statistic for this scenario?

Select one:

a. 0.983

b. 2.181

c. 3.004

d. 1.191 Correct

Feedback

The correct answer is: 1.191

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What is the standard error of the proportion?

Select one:

a. 0.087 Correct

b. 0.0632

c. 0.032

d. 0.051

Feedback

The correct answer is: 0.087

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What is the standard error of the proportion?

Select one:

a. 0.041

b. 0.089

c. 0.026 Correct

d. 0.011

Feedback

The correct answer is: 0.026

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What is the test statistic for this scenario?

Select one:

a. -2.729

b. -0.998

c. -3.661

d. -1.260 Correct

Feedback

The correct answer is: -1.260

About 30% of the male population living in an urban area smokes cigarette. A researcher believes that male aged 16-30 are more likely smokes cigarette than other ages in the urban area population. The researcher surveys 300 male aged 16-30 and finds that 80 of them smokes cigarette:

What is the observed value of the sample proportion?

Select one:

a. 0.372

b. 0.419

c. 0.267 Correct

d. 0.189

Feedback

The correct answer is: 0.267

A building contractor/engineer is increasing his price for building projects, claiming that the cost of labor and material is going up and accounts for 65% of his budget. In a random sample of 30 of his projects it is found that in 20 of the projects the cost of the material is higher.

What is the observed value of the sample proportion?

Select one:

a. 0.667 Correct

b. 0.429

c. 0.739

d. 0.921

Feedback

The correct answer is: 0.667

The traffic management office claims that 65% of road accidents are related to motorcycles. In a random sample of 200 accidents, it is found that 135 of the accidents are related to motorcycles.

What is the test statistic for this scenario?

Select one:

a. 0.0548

b. 0.0808

c. 0.0993

d. 0.0741 Correct

Feedback

The correct answer is: 0.0741

A building contractor/engineer is increasing his price for building projects, claiming that the cost of labor and material is going up and accounts for 65% of his budget. In a random sample of 30 of his projects it is found that in 20 of the projects the cost of the material is higher.

At the 5% level of significance, test the contractor/engineer’s claim. Based on the test, what can you conclude?

Select one:

a. Accept the null hypothesis Correct

b. Reject the null hypothesis

Feedback

The correct answer is: Accept the null hypothesis

The traffic management office claims that 65% of road accidents are related to motorcycles. In a random sample of 200 accidents, it is found that 135 of the accidents are related to motorcycles.

What is the observed value of the sample proportion?

Select one:

a. 0.963

b. 0.675 Correct

c. 0.367

d. 0.822

Feedback

The correct answer is: 0.675

The traffic management office claims that 65% of road accidents are related to motorcycles. In a random sample of 200 accidents, it is found that 135 of the accidents are related to motorcycles.

What is the standard error of the proportion?

Select one:

a. 0.062

b. 0.077

c. 0.034 correct

d. 0.045  
Short Quiz 15

Describe the relationship based when r value = 0.01

Select one:

a. No apparent correlation Correct

b. Weak positive correction

c. Strong positive correction

d. Minimal positive correction

Feedback

The correct answer is: No apparent correlation

Linear correlation coefficient is always a value between \_\_\_\_ and \_\_\_\_.

Select one:

a. 0, 100 Incorrect

b. 1, 100

c. +1, -1

d. 0, 1

Feedback

The correct answer is: +1, -1

Year and household monthly water consumption in the Philippines

Select one:

a. Water consumption is the explanatory variable and year is the response variable Incorrect

b. Year is the explanatory variable and water consumption is the response variable

c. Cannot be determined

Feedback

The correct answer is: Year is the explanatory variable and water consumption is the response variable

Describe the relationship based on the r-value r=0,

Select one:

a. No relationship

b. Deterministic relationship Incorrect

c. Weak relationship

d. Strong relationship

Feedback

The correct answer is: No relationship

The value of a perfect positive coefficient is \_\_\_\_\_\_\_\_.

Select one:

a. A positive number greater than 1

b. Equal to zero.

c. None of the choices

d. Equal to 1.

e. A positive number greater than 0. Incorrect

Feedback

The correct answer is: Equal to 1.

Describe the relationship based when r value = 0.75

Select one:

a. Minimal positive correction Incorrect

b. Weak positive correction

c. No apparent correlation

d. Strong positive correction

Feedback

The correct answer is: Strong positive correction

The variable that causes an effect

Select one:

a. Response variable

b. Explanatory variable Correct

c. Trend variable

d. Correlation variable

Feedback

The correct answer is: Explanatory variable

This pattern is produced when the score of one observation is high, the score of the other observation to be high.

Select one:

a. XY Plot

b. Positive Correlation

c. Direct Correlation Incorrect

d. Negative Correlation

Feedback

The correct answer is: Positive Correlation

Year and household monthly water consumption in the Philippines

Select one:

a. Water consumption is the explanatory variable and year is the response variable Incorrect

b. Cannot be determined

c. Year is the explanatory variable and water consumption is the response variable

Feedback

The correct answer is: Year is the explanatory variable and water consumption is the response variable

The variable that reflects the effect

Select one:

a. Explanatory variable

b. Response variable Correct

c. Correlation variable

d. Trend variable

Feedback

The correct answer is: Response variable

Learning Activity 15 Stats

Describe the relationship based when r value = 0.63

Select one:

a. Minimal positive correction

b. Strong positive correction Correct

c. No apparent correlation

d. Weak positive correction

Feedback

The correct answer is: Strong positive correction

The symbol used to measure the strength and direction of a linear correlation

Select one:

a. r2

b. r

c. XY

d. None of the choices Incorrect

Feedback

The correct answer is: r

It is also called independent variable

Select one:

a. Explanatory variable

b. Response variable Incorrect

c. Trend variable

d. Correlation variable

Feedback

The correct answer is: Explanatory variable

Salary and number of years of experience

Select one:

a. Number of years is the explanatory variable and salary is the response variable Correct

b. Salary is the explanatory variable and number of years is the response variable

c. Cannot be determined

Feedback

The correct answer is: Number of years is the explanatory variable and salary is the response variable

Describe the relationship based when r value = 0.20

Select one:

a. No apparent correlation

b. Minimal positive correction Incorrect

c. Weak positive correction

d. Strong positive correction

Feedback

The correct answer is: Weak positive correction

Expenditure is an example of a

Select one:

a. Trend variable

b. Explanatory variable

c. Correlation variable

d. Response variable Correct

Feedback

The correct answer is: Response variable  
Short Quiz 5 Stats

True or False: Empirical Rule states that 68% of the data falls within the 1 standard deviation.

The correct answer is: FALSE

True or False: In order to apply the Central Limit Theorem, a sample size must be greater than or equal to 20.

The correct answer is: FALSE

True or False: In Central Limit Theorem, the standard deviation of the distribution of means is estimated by dividing the standard deviation of the population by the square of the sample size.

The correct answer is: FALSE

True or False: A random sample of size 49 is selected from a known population with a mean of 29 and a standard deviation of 3.3. Samples of the same size are repeatedly collected, allowing a sampling distribution of sample means to be drawn. The sampling distribution of sample mean will be approximately a normal curve.

The correct answer is: TRUE  
  
Margin of Error is the value that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from the mean to identify the confidence interval.  
A: add/subtract

In a normal curve, a \_\_\_\_\_ of 1 means 1 deviation data are above the average.

The correct answer is: Z score

Empirical rule states that \_\_\_\_\_\_\_ % of data falls within 2 standard deviation.

The correct answer is: 95

True or False: Standard deviation of a distribution of means is the standard error of the mean.

The correct answer is: TRUE

True or False: If the population is normally distributed, the sampling distribution of sample mean is equal to 1.  
A: false  
  
If there are 2 volunteers that are randomly selected from population of 10 for each sample, how many will be the possible samples?  
A: 45

The correct answer is: FALSE

The average of the population.

The correct answer is: Mean

PROBLEM SOLVING: Write the answer corresponds to the problem.

REMINDERS

If the answer requires decimals, express your answer in 2 decimal places.

If your answer is more than 3 digits, DO NOT INCLUDE THE COMMA.

If there are three students that are randomly selected from population of 20 for each sample, how many possible samples will there be?

The correct answer is: 1140

True or False: In Central Limit Theorem, the mean of the sampling distribution of the mean is equal to the population mean.

The correct answer is: TRUE

It is located at the middle of the normal curve.

The correct answer is: Mean

Bell shaped curve.

The correct answer is: Normal Curve

In a normal curve, the mean always has a z score of \_\_\_\_

The correct answer is: 0

Week 6 Learning Activity 5 Stats Different questions. Comment below yung questions kapag wala pa rin dito.

If the population is normally distributed,

Select one:

a. All of the choices

b. The sampling distribution of sample mean is normal Correct

c. Standard deviation is equal to Mean

d. Standard deviation is distributed along the normal curve

Feedback

The correct answer is: The sampling distribution of sample mean is normal

Standard deviation of a distribution of means is the standard error of the mean.

Select one:

a. The statement is TRUE Correct

b. None of the choices

c. The statement is FALSE

d. The statement do not have sufficient information to conclude

The correct answer is: The statement is TRUE

A random sample of size is 50 is selected from a known population with a mean of 13 and a standard deviation of 3.3. Samples of the same size are repeatedly collected, allowing a sampling distribution of sample means to be drawn. What is the approximate standard deviation of the sample means?

Select one:

a. 12.692

b. 0.066

c. 0.467 Correct

d. 15.15

Feedback

The correct answer is: 0.467

A random sample of size 50 is selected from a known population with a mean of 25 and a standard deviation of 5.2. Samples of the same size are repeatedly collected, allowing a sampling distribution of sample means to be drawn. What does the problem tells us?

Select one:

a. All of the above statements does not describe the problem

b. Standard deviation of the sample mean is calculated by 5.2 divided by size of the sample which is 50

c. The sampling distribution of sample mean will be approximately a normal curve

d. Z score can be calculated by dividing 25 by the size of samples which is 50

Answer: c. The sampling distribution of sample mean will be approximately a normal curve

If there are 5 students that are randomly selected from population of 10 for each sample, how many will be the possible samples?

Select one:

a. 250

b. 126

c. 50

d. 252

Answer: 252

In Central Limit Theorem, the standard deviation of the distribution of means is estimated by

Select one:

a. Mean of the population multiplied by the standard deviation of the population

b. Dividing the standard deviation of the population by the square root of the sample size

c. Dividing the mean of the population by the square root of the deviation of the population

d. Mean of the population divided by the mean of the sampling distribution

Answer:Dividing the standard deviation of the population by the square root of the sample size

Which of the following applies to Central Limit Theorem?

Select one:

a. None of the answers is correct.

b. All of the answers are correct.

c. Distribution of sample means may be assumed normal as long as sample size is greater than or equal to 30.

d. When the sample size is large or above 30, the population is not normal Incorrect

e. Population is normally distributed when standard deviation is large

Feedback

The correct answer is: Distribution of sample means may be assumed normal as long as sample size is greater than or equal to 30.  
Short Quiz 7 Stats

Margin of Error is the value that \_\_\_\_\_\_ from the mean to identify the confidence interval.

Select one:

a. Subtracted

b. Added

c. None of the choices

d. Added and subtracted

The correct answer is: Added and subtracted

Compute for the confidence intervals of the following data:

Mean = 88

Standard deviation = 6

Sample size = 100

Confidence level = 95%

Select one:

a. 73.89, 79.89

b. 80.08, 84.23

c. 89.05, 92.45

d. 86.82, 89.18

The correct answer is: 80.08, 84.23

The number of degrees of freedom is \_\_\_\_\_\_\_\_ the sample size.

Select one:

a. None of the choices

b. Greater than

c. Equal to

d. Less than

The correct answer is: Less than

Compute for the confidence intervals of the following data: Mean = 66 Standard deviation = 5 Sample size = 100 Confidence coefficient = 1.645

Select one:

a. 70.04, 71.34

b. 71.90, 72.22

c. 69.33, 70.02

d. 65.18, 66.82

The correct answer is: 65.18, 66.82

Find the point estimate of the population parameter of the grades of students. The answer must be rounded off to the nearest hundredths.

The correct answer is: 8 6 . 2 5

The range of possible values expected to capture the population mean is called the Margin of Error.

Select one:

a. TRUE

b. FALSE

The correct answer is: FALSE

Which of the following does not describes a T distribution?

Select one:

a. None of the choices

b. Bell shaped curve

c. Symmetrical

d. Mean of Means is equal to 0

The correct answer is: Mean of Means is equal to 0

Compute for the margin of error given the following data:

Mean = 80

Standard deviation = 4

Sample size = 100

Confidence level = 95%

Note that the answer must be rounded off to the nearest hundredths.

Answer:

Incorrect

Feedback

The correct answer is: 0.78

Which of the following is used to estimate population parameter?

Select one:

a. Point Estimate

b. Central Limit Theorem Estimate Incorrect

c. Mean Estimate

d. Biased Estimate

Feedback

The correct answer is: Point Estimate

Mean of means is also called

Select one:

a. Unbiased estimate

b. Interval Estimate Incorrect

c. Point Estimate

d. Population Mean

Feedback

The correct answer is: Point Estimate

Compute for the margin of error given the following data:

Mean = 77

Standard deviation = 3

Sample size = 100

Confidence coefficient = 2.58

Note that the answer must be rounded off to the nearest hundredths.

Answer:

Incorrect

Feedback

The correct answer is: 0.77

Learning activity 7 Stats

Compute for the confidence intervals of the following data:

Mean = 66

Standard deviation = 3

Sample size = 100

Confidence level = 95%

Select one:

a. 66.03, 69.03

b. 64.04, 67.96

c. 65.41, 66.59

d. 69.03, 70.99

The correct answer is: 65.41, 66.59

Common choices for the confidence level.

Select one:

a. 68%, 95%, 99.7%

b. 90%, 95%, 99%

c. 95%, 99%, 100%

d. 0%, 50%, 100%

The correct answer is: 90%, 95%, 99%

In T distribution, if we increase the number of observations

Select one:

a. the distribution approaches the shape of a normal distribution

b. the mean approaches zero

c. the curve lies within the horizontal axis

d. the mean increases

e. all of the choices

The correct answer is: the distribution approaches the shape of a normal distribution

A single value given as an estimate of a parameter of a population.

Select one:

a. Confidence Limit

b. Sample Mean Correct

c. Sample distribution

d. Confidence coefficient

Feedback

The correct answer is: Sample Mean

For example, a 90% confidence interval covers 90% of the normal curve, so the probability of observing a value outside of this area is \_\_\_\_\_\_\_\_\_\_\_\_.

Select one:

a. Less than 10%

b. Higher than the 2 nd standard deviation Incorrect

c. Greater than 10%

d. Lower than the 2 nd standard deviation

Feedback

The correct answer is: Less than 10%

This is the value that is added to and subtracted from the mean to identify the confidence interval.

Select one:

a. Confidence Level

b. Margin of Error

c. Confidence Interval Incorrect

d. Standard Deviation Error

Feedback

The correct answer is: Margin of Error  
Learning Activity 10 Stats

Find the sample size given 95% confidence, Margin of Error = 0.15 and p ^ =0.25.

Select one:

a. 34 Incorrect

b. 33

c. 31

d. 32

Feedback

The correct answer is: 33

Find the sample size given 90% confidence, Margin of Error = 0.15 and ^p =0.25.

Select one:

a. 20 Incorrect

b. 22

c. 23

d. 21

Feedback

The correct answer is: 23

Find the sample size given 99% confidence, Margin of Error = 0.10 and ^p =0.35.

Select one:

a. 389

b. 215 Incorrect

c. 139

d. 152

Feedback

The correct answer is: 152

Find the sample size given 99% confidence, Margin of Error = 0.18 and ^p =0.30.

Select one:

a. 41

b. 42

c. 44 Incorrect

d. 43

Feedback

The correct answer is: 43

The Engineer of the building wants to use the proportion of the population to determine the sample size needed to interview regarding their idea about the new color design of the building. He wants to be able to assure with probability 0.90 that his error will be most 0.10. Similar surveys during past year that 85% approved the new color design. How large a sample does the Engineer need?

Select one:

a. 278 Incorrect

b. 2,145

c. 1,372

d. 196

Feedback

The correct answer is: 196  
Short Quiz 11 Stats

Determine whether each of the following is a null of an alternative hypothesis:

The proportion of computer in the software laboratory is lower than the total number of BS IT students in the university.

Answer:

alternative hypothesis

Correct

Feedback

The correct answer is: Alternative hypothesis

The alternative hypothesis and null hypothesis should be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Select one:

a. Mutually exclusive

b. All of the choices

c. None of the choices

d. Mutually inclusive Correct

Feedback

The correct answer is: Mutually inclusive

Determine whether each of the following is a null of an alternative hypothesis:

The proportion of an employee income is greater than the monthly expenses of the employee.

Answer:

null hypothesis

Incorrect

Feedback

The correct answer is: Alternative hypothesis

William collected a random sample of 88 people, asking how many times they open ABC web site per day on average, and calculated x¯ = 50.30. ABC suggests that µ = 55, and s = 10. William thinks the actual mean is less than the website owner claims. What is the null and alternative hypothesis?

Select one:

a. 55

b. Null hypothesis µ = 55, Alternative hypothesis µ < 55

c. Null hypothesis µ ? 55, Alternative hypothesis µ

d. Null hypothesis µ > 55, Alternative hypothesis µ = 55

e. 55, Alternative hypothesis µ ? 55 Correct

f. Null hypothesis µ

Feedback

The correct answer is: Null hypothesis µ = 55, Alternative hypothesis µ < 55

A type of test that is denoted by the symbol Ho.

Select one:

a. Rejection hypothesis Incorrect

b. Statistical hypothesis

c. Alternative hypothesis

d. Null hypothesis

Feedback

The correct answer is: Null hypothesis

The probability of making type I error is

Select one:

a. ß

b. 1- a

c. 1- ß

d. a Correct

e. µ - a

Feedback

The correct answer is: a

For the 99% confidence level,

Select one:

a. a

b. a

c. a

d. 0.001

e. a

f. 0.010

g. 0.005

h. 0.025 Correct

Feedback

The correct answer is: 0.010

Determine whether each of the following is a null of an alternative hypothesis:

A police precinct claims that there is ten crimes on the average are reported.

Answer:

alternative hypothesis

Incorrect

Feedback

The correct answer is: Null hypothesis

This refers to the area where the value of the test statistic lies for which we will reject the null hypothesis.

Select one:

a. Rejection region and Null region

b. Rejection region and Critical region Correct

c. Null region and Critical region

d. Null region

e. Critical region

f. None of the choices

g. Rejection region

h. All of the choices

Feedback

The correct answer is: Rejection region and Critical region

Learning Activity 11 Stats

Determine whether each of the following is a null of an alternative hypothesis:

The average income of an employee is 12,000 pesos.

Answer:

null hypothesis

Correct

Feedback

The correct answer is: Null hypothesis

The level of significance is the

Select one:

a. 1 - p value

b. Same as confidence interval

c. Maximum allowable probability of Type II error

d. Minimum allowable probability of Type II error

e. Probability of committing a Type I error Correct

Feedback

The correct answer is: Probability of committing a Type I error

What is the null hypothesis to the claim that people like android phone than IOS? State the null hypothesis.

Select one:

a. Less people like IOS than android

b. More people like android than IOS phone Correct

c. Less people like android and IOS phone

d. More people like IOS phone than android phone

Feedback

The correct answer is: More people like android than IOS phone

If the null hypothesis is true and rejected, the decision is incorrect – Type I Error

Select one:

a. Rejection Error

b. Type I Error Correct

c. Correction Error

d. Type II Error

Feedback

The correct answer is: Type I Error

Determine whether each of the following is a null of an alternative hypothesis:

The average internet usage of a College student is 6 hours.

Answer:

null hypothesis

Correct

Feedback

The correct answer is: Null hypothesis  
Short quiz 14

In a \_\_\_\_\_\_\_\_\_\_\_\_, high values in one variable correspond to high values in the other variable.

Select one:

a. Perfect Correlation Incorrect

b. Positive Correlation

c. Scattered Correlation

d. Negative Correlation

Feedback

The correct answer is: Positive Correlation

Graphical representation of the relationship between two variables.

Select one:

a. Line Plots Incorrect

b. XY intersection plot

c. scatter plot

d. Cartesian plane

Feedback

The correct answer is: scatter plot

When examining scatterplot and draw an ellipse around the data, long and narrow ellipses means

Select one:

a. Negative linear association

b. Weak linear association

c. Positive linear association Incorrect

d. Strong linear association

e. Cannot determine with the given information

Feedback

The correct answer is: Strong linear association

This measures relationship between bivariate data.

Select one:

a. None of the choices

b. Correlation Correct

c. All of the choices

d. Linear Regression

e. Scatterplot Analysis

Feedback

The correct answer is: Correlation

A \_\_\_\_\_\_\_\_\_\_\_\_\_ is simply a scatterplot in which we connect successive chronological observations with a line segment to give more information about how the data values are changing over a period of time.

Select one:

a. XY Plot

b. Scatter Plot

c. Correlation Plot

d. Line plot Correct

Feedback

The correct answer is: Line plot

The data had a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ when one variable increases, the other variable also decreases.

Select one:

a. negative linear association Incorrect

b. proportional association

c. elliptical association

d. positive linear association

Feedback

The correct answer is: positive linear association

The goal of examining bivariate data is to show some relativity or association between two or more variables.

Select one:

a. The statement is TRUE. Incorrect

b. The statement is FALSE.

Feedback

The correct answer is: The statement is FALSE.

Learning Actvity 14 Stats

Given the data below, what is the direction of the association between the two variables.

Select one:

a. Positive linear association Incorrect

b. Weak linear association

c. Strong linear association

d. None of the choices

e. Negative linear association

Feedback

The correct answer is: Negative linear association

The data had a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ when one variable increases, the other variable also increases.

Select one:

a. positive linear association Correct

b. proportional association

c. elliptical association

d. negative linear association

Feedback

The correct answer is: positive linear association

The line that is closest to the points is called \_\_\_\_\_\_\_\_\_\_\_\_\_.

Select one:

a. Trend line Correct

b. Correlation line

c. Cross line

d. Scatter line

Feedback

The correct answer is: Trend line

The three important characteristics of a bivariate?

Select one:

a. Elliptical, Rounded, Scattered

b. Proportional, Directional, Elliptical

c. Direction, Shape, Strength

d. Line, Points, Shape Incorrect

Feedback

The correct answer is: Direction, Shape, Strength

The series of disconnected points is referred to as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Select one:

a. XY Plots

b. Trend line plots

c. Bivariate data

d. scatter plot Correct

Feedback

The correct answer is: scatter plot

Short Quiz 16 Stats

The equation y=2x2 + 9 will produce a

Select one:

a. Parabola Correct

b. Ellipse

c. Circle

d. Straight line

Feedback

The correct answer is: Parabola

When slope is positive,

Select one:

a. y increases as x increases Correct

b. y decreases as x increases

c. y increases, x values approaches point of origin

d. y decreases, x values approaches 1

Feedback

The correct answer is: y increases as x increases

In the slope-intercept equation of a line, the slope of the line is represented as the coefficient of the variable x.

Select one:

a. FALSE

b. Cannot be determined

c. TRUE Correct

Feedback

The correct answer is: TRUE

Given the table below, what is the linear equation?

Select one:

a. y=3x + 11 Incorrect

b. y=6x + 5

c. y=8x + 3

d. y=3x + 8

Feedback

Your answer is incorrect.

The correct answer is: y=8x + 3

If the line has no slope,

Select one:

a. The line is a horizontal line

b. The line is at the point of origin

c. The line intercepts the x and y axis

d. The line lies at the x axis Incorrect

Feedback

The correct answer is: The line is a horizontal line

Given the table below, what is the slope?

Select one:

a. 9

b. 11

c. 8

d. 3 Incorrect

Feedback

Your answer is incorrect.

The correct answer is: 8

Given the equation y = 7x+ 30, what is the slope?

Answer:

4.2

Incorrect

Feedback

The correct answer is: 7

Given the table and graph, determine the slope intercept equation.

Select one:

a. y=5x + 1

b. y=10x + 2 Incorrect

c. y=5x + 2

d. y=10x + 1

Feedback

Your answer is incorrect.

The correct answer is: y=5x + 1

Given the equation 9y = 2x + 81, what is the y intercept?

Answer:

Incorrect

Feedback

The correct answer is: 9

The equation y=mx + b is also known as

Select one:

a. slope intercept form

b. y intercept Incorrect

c. correlation intercept form

d. xy intercept form

Feedback

The correct answer is: slope intercept form

Learning Activity 16 Stats

Given the equation y = 3x+ 10, what is the slope?

Answer:

3

Correct

Feedback

The correct answer is: 3

Given the table and graph, determine the slope intercept equation.

Select one:

a. y=3x + 1

b. 2y=6x + 3

c. y=-3x + 3 Correct

d. 2y=6x + 1

The correct answer is: y=-3x + 3

Given the table below, what is the slope?

Select one:

a. 2 Correct

b. 1

c. 8

d. 7

Feedback

Your answer is correct.

The correct answer is: 2

Given the equation 2y = 3x + 10, what is the y intercept?

Answer:

2

Incorrect

Feedback

The correct answer is: 5

Given the table below, what is the linear equation?

Select one:

a. y=2x + 7 Correct

b. y=5x + 2

c. y=7x + 1

d. y=7x + 5

Feedback

Your answer is correct.

The correct answer is: y=2x + 7

Write the slope-intercept equation of the line that has slope 6 and y-intercept 4.

answer: 6x+4  
Q: True or False: The Greek letter alpha represents the mean.  
A: False

Q: This determines the degree to which values of a random variable dif  
A: Variance

Q: Find the median of the following data set. 11, 13, 15, 17, 19, 21, 22, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 51, 53, 55, 57, 59  
A: 31

Q: A single value given as an estimate of a parameter of a population.  
A: Sample Mean

Q: Empirical Rule states that 68% of the data falls within the 1 standard deviation.  
A: False

Q: The sum of all the probabilities P(X = x) for all possible values of a discrete random variable X must equal 1.  
A: The statement is TRUE.  
True or False: Variance is the degree to which values of a random variable differ from the expected value ANSWER: TRUE

Q: As the sample size increases,  
A: sampling distribution becomes closer to a normal distribution.

Q: Given the following sample data, compute for the true mean. The answer must have two decimal places.1 1 1 2 3 4 5 5 5 8 8 8 8  
A: 4.53

Q: How many possible outcomes when you simultaneously toss three fair coins.  
A: 8

Q: Identify if the random variable is a DISCRETE or CONTINUOUS. Weight of students in a university  
A: CONTINUOUS

Q: True or False: In Statistics, variance is defined as the number of times an outcome can occur compared to all possible outcomes.  
A: False

Q: True or False: Mean is the sum of all possible values of random variables.  
A: False

Q: Find the median of the following data set. 44, 46, 29, 39, 59, 59, 39  
A: 39

Q: Which of the following does not describes a T distribution?  
A: Mean of Means is equal to 0

Q: True or False: Random sample happened when data is collected in no certain order  
A: True

Q: True or False: In order to apply the Central Limit Theorem, a sample size must be greater than or equal to 20.  
A: False

Q: To calculate the mean from a sample,  
A: Add all the values and divided by the total number of samples

Q: Which of the following is used to calculate population parameter?  
A: Point Estimate

Q: Identify whether each example describes a random sample. Answer with Yes or No The manager chooses 30 employees randomly from a department.  
A: Yes

Q: Identify if the random variable is a DISCRETE or CONTINUOUS. Total number of volunteers in a community  
A: DISCRETE

Q: Normal Distribution Curve is also called  
A: Bell Curve

Q: In Central Limit Theorem, the mean of the sampling distribution of the mean is equal to the  
A: Population mean

Q: Which measure of tendency is the best estimator?  
A: Mean

Q: The number of times out of 100 that the repeated experiment would be expected to capture the population mean within the given interval.  
A: Confidence Level

Q: In a normal curve, a \_\_\_ of 1 means 1 deviation data are above the average.  
A: Z score

Q: True or False: In Central Limit Theorem, the mean of the sampling distribution of the mean is equal to the population mean.  
A: True

Q: Confidence coefficient is a single value given as an estimate of a parameter of a population.  
A: FALSE. Change “confidence coefficient” to sample mean

Q: For example, a 90% confidence interval covers 90% of the normal curve, so the probability of observing a value outside of this area is \_\_\_\_\_\_\_\_\_\_\_\_.  
A: Less than 10%

Q: Use to check the normality of a distribution  
A: Normal quantile plot

Q: Identify if the random variable is a DISCRETE or CONTINUOUS. Number of winning tournaments of a varsity team  
A: DISCRETE

Q: The weighted average of the possible values of random variables.  
A: Mean

Q: Identify whether each example describes a random sample. Answer with Yes or No. Collects the number of students who rides on the train.  
A: Yes

Q: Consider the given the probability distribution  
A: 4.100

Q: PROBLEM SOLVING: Write the answer corresponds to the problem.  
REMINDERS If the answer requires decimals, express your answer in 2 decimal places. If your answer is more than 3 digits, DO NOT INCLUDE THE COMMA.  
If there are three students that are randomly selected from population of 20 for each sample, how many possible samples will there be?  
A: 1140

Q: Which of the following describes a Normal Distribution Curve.  
A: All of the choices

Q: True or False: Random distribution is the process of assigning a number to each member of the population  
A: False

Q: How many regions can be found at the left side of the normal distribution curve?  
A: 3

Q: Normal Distribution Curve is also called  
A: Bell Curve

Q: Given the data set 10,11,11,12,12,12,13,13,13,13,24,24,14,15,15,16, how many numbers are in the lower quartile?  
A: 4

Q: In order to apply the Central Limit Theorem, a sample size must be greater than or equal to \_\_\_\_\_\_\_.  
A: 30

Q: Who is the famous mathematician where the normal distribution curve was named after?  
A: Carl Friedrich Gauss  
  
Population Mean is an example of a parameter.  
A: true

Q: True or False: People whose names were drawn out of the survey is an example of a random sample  
A: True

Q: Empirical Rule states that \_\_\_\_\_ % of data falls within the first standard deviation from the mean.  
A: 68

Q: The sum of all the probabilities P(X = x) for all possible values of a discrete random variable X must equal to  
A: 1

Q: True or False: The number of questions that you answer correctly on this quiz is an example of a discrete random variable.  
A: False

Q: Identify whether each example describes a random sample. Answer with Yes or No. A teacher conducts examination to all his students.  
A: No

Q: Given the data set 10,11,11,12,12,12,13,13,13,13,24,24,14,15,15,16, find the upper quartile  
A: 14

Q: What is the formula to calculate for the z-score?  
A: Mean value of the variable subtracted from the observed value divided by the standard deviation

Q: Given the following table, what is the correct computation to find mean?  
x,0,1,2  
p(x),0.30,0.20,0.10  
A: None of the choices

Q: True or False: As the sample size increases, the standard error increases.  
A: False

It is the number of times an outcome can occur compared to all possible outcomes.

Select one:

a. Variance

b. Standard Deviation

c. Mean

d. Probability

What is the common symbol for the mean?

Select one:

a. ∑

b. Α

c. Ω

d. µ

True or False: Mean is computed as the weighted average of the possible numbers of random variables. ANSWER: TRUE

Assuming z-score is 1, which of the following statement is TRUE.

Select one:

a. All values are less than the mean.

b. All values are equal to the z-score

c. All values are equal to the mean.

d. All values are greater than the mean.

True or False: To determine the value of the mean, multiply each possible outcome of the random variables X by its associated probability and the take the sum over all possible values of X.

Answer:  true

How do you determine the value of the mean,

Select one:

a. Multiply each possible outcome of the random variables X by its associated probability and the take the square root of the sum of all possible values of X.

b. None of the choices

c. Sum each possible outcome of the random variables X by its associated probability and the take the product of all possible values of X.

d. Multiply each possible outcome of the random variables X by its associated probability and the take the sum over all possible values of X.

True or False: The probability variance of a discrete random variable is a graph, a table or a formula that specifies the probability associated with each possible value that the random variable can assume. Answer: FALSE  
  
true or False: One of the most important characteristics of any probability distribution is the mean.  
~ true  
  
The probability distribution of a discrete random variable is a graph, a table or a formula that specifies the probability associated with each possible value that the random variable can assume.

Select one:

a. The statement is INCORRECT. The word “formula” should not be included in the statement.

b. The statement is INCORRECT. The word “graph” should not be included in the statement.

c. The statement is INCORRECT. The word “graph and formula” should not be included in the statement.

d. The statement is ALWAYS CORRECT.

Which of the following applies to a normal distribution?

Select one:

a. Mean is greater than Median.

b. Data is exactly equal to the mean.

c. Exactly ½ of the data is above the mean and ½ of data is below.

d. Median is greater than Mean.

e. None of the choices

What are the percentages of normal distribution within 1, 2 and 3 standard deviation.

Select one:

a. Approximately 50% and 50% respectively

b. Exactly 25%, 25% and 50% respectively

c. Exactly 100% be applied to each standard deviation

d. Approximately 68%, 95% and 99.7% respectively

In order to apply the Central Limit Theorem, a sample size \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Select one:

a. Must be greater than zero.

b. Must be greater than sample distribution.

c. Must be equal than the sample mean.

d. Must be greater than 30.

This is a representative subset of a population.

Select one:

a. Standard Deviation

b. Sample

c. Statistics

d. Mean

In the Empirical Rule, \_\_\_\_\_\_\_ % of data will fall in with two standard deviation.

Select one:

a. 99.7

b. 34

c. 50

d. 100

e. 95

This is always in the center of the normal curve

Select one:

a. Mode

b. Median

c. Standard Deviation

d. Mean

True or False: Variance is the degree to which values of a random variable differ from the expected value.   
A: false

In a normal curve, the mean is located at the

Select one:

a. highest point of the curve

b. lowest point of the curve

c. midpoint of the curve

d. intersection of the lowest and highest point

The range of probability is

Select one:

a. can be any number (positive or negative)

b. from zero to 1

c. negative 1 to positive 1

d. from zero to any positive number

The standard deviation of the normal distribution is

Select one:

a. should always be a positive number

b. always equal to zero

c. always equal to one

d. greater than or equal to zero

This determines the degree to which values of a random variable differ from the expected value.

Select one:

a. Median

b. Standard Deviation

c. Variance

d. Mode

e. Mean

The mean of the normal distribution is

Select one:

a. should always be a positive number

b. always equal to zero

c. always equal to one

d. greater than or equal to zero

This are numbers that summarizes data for an entire population

Select one:

a. Standard Deviation

b. Mean

c. Sample Distribution of sample means

d. Standard deviation of the distribution of the sample means

e. Sample

f. Parameter

g. Random Sample

h. Standard Curve

i. Sampling Error

j. Population

k. Population Mean

l. Distribution Error

m. Median

n. Mode

o. Statistics

p. Sample

q. Deviation Error

True or False: The probability of an outcome that all heads face up when fairly tossing three coin is 3/8.

Answer: false

The range of possible values expected to capture the population mean.

Select one:

a. Standard Deviation Error

b. Confidence Interval

c. Margin of Error

d. Confidence Level

The t-distribution shape changes as the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ changes.

Select one:

a. Population Mean

b. None of the choices

c. Sample Mean

d. Sample size

The confidence level is expressed in terms of \_\_\_\_\_\_\_\_\_\_\_\_.

Select one:

a. Percentage

b. Whole Number

c. Fraction

d. Ratio

In Central Limit Theorem, the standard deviation of the population is estimated by dividing the standard deviation of the population by the square of the sample size.

Select one:

a. The statement is TRUE

b. The statement is FALSE

c. The statement is SOMETIMES FALSE

d. The statement is SOMETIMES TRUE

Q: True or False: The Greek letter alpha represents the mean.  
A: False

Q: This determines the degree to which values of a random variable dif  
A: Variance

Q: Find the median of the following data set. 11, 13, 15, 17, 19, 21, 22, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 51, 53, 55, 57, 59  
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A: Normal Curve

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A: Mean

Q: The number of times out of 100 that the repeated experiment would be expected to capture the population mean within the given interval.  
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A: Less than 10%

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A: Normal quantile plot

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Q: The weighted average of the possible values of random variables.  
A: Mean

Q: Identify whether each example describes a random sample. Answer with Yes or No. Collects the number of students who rides on the train.  
A: Yes

Q: Consider the given the probability distribution  
A:

Q: PROBLEM SOLVING: Write the answer corresponds to the problem.  
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A: 1140

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A: All of the choices

Q: True or False: Random distribution is the process of assigning a number to each member of the population  
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Q: How many regions can be found at the left side of the normal distribution curve?  
A: 3

Q: Normal Distribution Curve is also called  
A: Basic Curve

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Q: In order to apply the Central Limit Theorem, a sample size must be greater than or equal to \_\_\_\_\_\_\_.  
A: 30

Q: Who is the famous mathematician where the normal distribution curve was named after?  
A: Carl Friedrich Gauss

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A: 68

Q: The sum of all the probabilities P(X = x) for all possible values of a discrete random variable X must equal to  
A: 1

Q: True or False: The number of questions that you answer correctly on this quiz is an example of a discrete random variable.  
A: False

Q: Identify whether each example describes a random sample. Answer with Yes or No. A teacher conducts examination to all his students.  
A: No

Q: Given the data set 10,11,11,12,12,12,13,13,13,13,24,24,14,15,15,16, find the upper quartile  
A: 14

Q: What is the formula to calculate for the z-score?  
A: Mean value of the variable subtracted from the observed value divided by the standard deviation

Q: Given the following table, what is the correct computation to find mean?  
x,0,1,2  
p(x),0.30,0.20,0.10  
A: None of the choices

Q: True or False: As the sample size increases, the standard error increases.  
A: False

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Q: True or False: The Greek letter alpha represents the mean.  
A: False

Q: This determines the degree to which values of a random variable dif  
A: Variance

Q: Find the median of the following data set. 11, 13, 15, 17, 19, 21, 22, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 51, 53, 55, 57, 59  
A: 31

Q: A single value given as an estimate of a parameter of a population.  
A: Sample Mean

Q: Empirical Rule states that 68% of the data falls within the 1 standard deviation.  
A: False

Q: The sum of all the probabilities P(X = x) for all possible values of a discrete random variable X must equal 1.  
A: The statement is TRUE.

Q: As the sample size increases,  
A: sampling distribution becomes closer to a normal distribution.

Q: Given the following sample data, compute for the true mean. The answer must have two decimal places.1 1 1 2 3 4 5 5 5 8 8 8 8  
A: 4.53

Q: How many possible outcomes when you simultaneously toss three fair coins.  
A: 8

Q: Identify if the random variable is a DISCRETE or CONTINUOUS. Weight of students in a university  
A: CONTINUOUS

Q: True or False: In Statistics, variance is defined as the number of times an outcome can occur compared to all possible outcomes.  
A: False

Q: True or False: Mean is the sum of all possible values of random variables.  
A: False

Q: Find the median of the following data set. 44, 46, 29, 39, 59, 59, 39  
A: 39

Q: Which of the following does not describes a T distribution?  
A: Mean of Means is equal to 0

Q: True or False: Random sample happened when data is collected in no certain order  
A: True

Q: True or False: In order to apply the Central Limit Theorem, a sample size must be greater than or equal to 20.  
A: False

Q: To calculate the mean from a sample,  
A: Add all the values and divided by the total number of samples

Q: Which of the following is used to calculate population parameter?  
A: Point Estimate

Q: Identify whether each example describes a random sample. Answer with Yes or No The manager chooses 30 employees randomly from a department.  
A: Yes

Q: Identify if the random variable is a DISCRETE or CONTINUOUS. Total number of volunteers in a community  
A: DISCRETE

Q: Normal Distribution Curve is also called  
A: Normal Curve

Q: In Central Limit Theorem, the mean of the sampling distribution of the mean is equal to the  
A: Population mean

Q: Which measure of tendency is the best estimator?  
A: Mean

Q: The number of times out of 100 that the repeated experiment would be expected to capture the population mean within the given interval.  
A: Confidence Level

Q: In a normal curve, a \_ of 1 means 1 deviation data are above the average.  
A: Z score

Q: True or False: In Central Limit Theorem, the mean of the sampling distribution of the mean is equal to the population mean.  
A: True

Q: Confidence coefficient is a single value given as an estimate of a parameter of a population.  
A: FALSE. Change “confidence coefficient” to sample mean

Q: For example, a 90% confidence interval covers 90% of the normal curve, so the probability of observing a value outside of this area is \_\_\_\_\_\_\_\_\_\_.  
A: Less than 10%

Q: Use to check the normality of a distribution  
A: Normal quantile plot

Q: Identify if the random variable is a DISCRETE or CONTINUOUS. Number of winning tournaments of a varsity team  
A: DISCRETE

Q: The weighted average of the possible values of random variables.  
A: Mean

Q: Identify whether each example describes a random sample. Answer with Yes or No. Collects the number of students who rides on the train.  
A: Yes

Q: Consider the given the probability distribution  
A:

Q: PROBLEM SOLVING: Write the answer corresponds to the problem.  
REMINDERS If the answer requires decimals, express your answer in 2 decimal places. If your answer is more than 3 digits, DO NOT INCLUDE THE COMMA.  
If there are three students that are randomly selected from population of 20 for each sample, how many possible samples will there be?  
A: 1140

Q: Which of the following describes a Normal Distribution Curve.  
A: All of the choices

Q: True or False: Random distribution is the process of assigning a number to each member of the population  
A: False

Q: How many regions can be found at the left side of the normal distribution curve?  
A: 3

Q: Normal Distribution Curve is also called  
A: Basic Curve

Q: Given the data set 10,11,11,12,12,12,13,13,13,13,24,24,14,15,15,16, how many numbers are in the lower quartile?  
A: 4

Q: In order to apply the Central Limit Theorem, a sample size must be greater than or equal to \_\_\_\_\_.  
A: 30

Q: Who is the famous mathematician where the normal distribution curve was named after?  
A: Carl Friedrich Gauss

Q: True or False: People whose names were drawn out of the survey is an example of a random sample  
A: True

Q: Empirical Rule states that \_\_\_ % of data falls within the first standard deviation from the mean.  
A: 68

Q: The sum of all the probabilities P(X = x) for all possible values of a discrete random variable X must equal to  
A: 1

Q: True or False: The number of questions that you answer correctly on this quiz is an example of a discrete random variable.  
A: False

Q: Identify whether each example describes a random sample. Answer with Yes or No. A teacher conducts examination to all his students.  
A: No

Q: Given the data set 10,11,11,12,12,12,13,13,13,13,24,24,14,15,15,16, find the upper quartile  
A: 14

Q: What is the formula to calculate for the z-score?  
A: Mean value of the variable subtracted from the observed value divided by the standard deviation

Q: Given the following table, what is the correct computation to find mean?  
x,0,1,2  
p(x),0.30,0.20,0.10  
A: None of the choices

Q: True or False: As the sample size increases, the standard error increases.  
A: False

Which of the following is tells about t distribution,  
A: all of the choices  
  
Two dice is rolled and the sum of face up is being recorded and represented as X. What is P(x <= 5)? 10

In a normal distribution curve,: Mean is equal to Median; None of the choices; Mean is equal to Mode; Mean is equal to Median and Mode Mean is equal to Median and Mode

True or False: Sampling Error is the degree of error expected for a given sample design TRUE

Identify whether each example describes a random sample. Answer with Yes or No A survey company collects information on businessman in Metro Manila on who will they vote for president on the next election. Yes

1. Given the data set, find the Mean Value or Expected value (round off your answer to the nearest tenths): 4.2

Identify if the random variable is a DISCRETE or CONTINUOUS. The brightness of an LED bulb CONTINUOUS

In a normal distribution curve, data are divided into 3 equal parts.: The statement is FALSE.; None of the choices; The statement is TRUE.; The statement is SOMETIMES TRUE depending on the data set.

None of the choices

True or False: The probability of an outcome that all heads face up when fairly tossing three coin is 3/8. False

True or False: Variance is the degree to which values of a random variable differ from the expected value. False

Given the following mean, compute for the Mean of Means. The answer must have two decimal places. 4.5, 9.2, 9.1, 8.4 2.60

True or False: To determine the value of the mean, multiply each possible outcome of the random variables X by its associated probability and the take the sum over all possible values of X. True

Identify whether each example describes a random sample. Answer with Yes or No. Collects the number of students who rides on the train. Yes

True or False: The probability variance of a discrete random variable is a graph, a table or a formula that specifies the probability associated with each possible value that the random variable can assume. False

True or False: Mean is the sum of all possible values of random variables. False

Identify whether each example describes a random sample. Answer with Yes or No Women who volunteer to take a survey on human rights. No

The speed of cars travelling in the road and the water consumption of household are examples of: Continuous Discrete Random Variable; None of the choices; Discrete Random Variables; Discrete Continuous Random Variable; Continuous Random Variable Continuous Random Variable

Identify if the random variable is a DISCRETE or CONTINUOUS. Time travelled by an astronaut CONTINUOUS

This determines the degree to which values of a random variable differ from the expected value.: Mean; Median; Standard Deviation; Variance; Mode Variance

It is a part of population intended to represent a population as a whole.: Sample; Mode; Random Sample; Standard Curve; Standard deviation of the distribution of the sample means; Statistics; Sampling Error; Standard Deviation; Population; Distribution Error; Population Mean; Mean; Sample; Median; Sample Distribution of sample means; Deviation Error; Parameter Sample

True or False: Parameters are numbers that summarizes data for an entire population TRUE

1. Given the data set, find the Mean Value or Expected value (round off your answer to the nearest tenths): 4.2

The probability distribution of a discrete random variable is a graph, a table or a formula that specifies the probability associated with each possible value that the random variable can assume.: The statement is INCORRECT. The word “graph and formula” should not be included in the statement.; The statement is INCORRECT. The word “graph” should not be included in the statement.; The statement is INCORRECT. The word “formula” should not be included in the statement.; The statement is ALWAYS CORRECT. The statement is ALWAYS CORRECT.

It is a part of population intended to represent a population as a whole.: Standard deviation of the distribution of the sample means; Deviation Error; Standard Deviation; Sampling Error; Mean; Parameter; Random Sample; Mode; Statistics; Standard Curve; Sample; Sample Distribution of sample means; Population; Median; Sample; Population Mean; Distribution Error Sample

The standard deviation of the normal distribution is: always equal to zero; greater than or equal to zero; always equal to one; should always be a positive number always equal to one

It is the measure of how many standard deviations below or above the population mean.: Z-score; Normal Distribution Measurement; Median; Empirical Rule Z-score

In a normal distribution curve,: Mean is equal to Median and Mode; Mean is equal to Median; Mean is equal to Mode; None of the choices Mean is equal to Median and Mode

In a normal distribution curve, data are divided into 3 equal parts.: The statement is TRUE.; The statement is FALSE.; None of the choices; The statement is SOMETIMES TRUE depending on the data set. None of the choices

Given the data set 10,11,11,12,12,12,13,13,13,13,24,24,14,15,15,16, how many numbers are in the lower quartile?: 6; 1; 4; 0 4

Given the following table, what is the correct computation to find mean? : (0.30+0.20+0.10)/3; None of the choices ; (0.30+0.20+0.10)/(0+1+2) ; (0)(0.30) + (1)(0.20) + (2)(0.10); (0+1+2)(0.30+0.20+0.10) None of the choices

True or False: Random sample happened when data is collected in no certain order TRUE

Identify whether each example describes a random sample. Answer with Yes or No Renmel closes his eyes, opens a book and randomly points to a word on the page. She repeats the process for 30 times. No

True or False: Random distribution is the process of assigning a number to each member of the population FALSE

Identify whether each example describes a random sample. Answer with Yes or No. The speed of internet in all areas in the Visayas Region. Yes

True or False: To determine the value of the mean, multiply each possible outcome of the random variables X by its associated probability and the take the sum over all possible values of X. True

True or False: Standard deviation of the distribution of the sample means is computed as the population standard deviation multiplied by the square root of the sample size. FALSE

What is the probability distribution of occurring the all heads in a toss of three coins?: 0.25; 0.1255; 0; None of the choices; 1 0.1255

Given the following mean, compute for the Mean of Means. The answer should be rounded off to the nearest hundredths. 3.2 3.6 3.9 9.2

True or False: The probability variance of a discrete random variable is a graph, a table or a formula that specifies the probability associated with each possible value that the random variable can assume. False

True or False: Sample Distribution of sample means is the the distribution that describes the spread of the means of multiple samples from the sample population TRUE

Identify whether each example describes a random sample. Answer with Yes or No. Collects the election results in all areas in the Philippines during election No

Which of the following random activity would you define as a discrete random variable?: Depth of building excavation.; Height of students enrolled in an online course.; None of the choices.; Wind speed during typhoon.; Distance travelled of a tourist bus. None of the choices.

What is the common symbol for the mean?: Α; ∑; µ; Ω µ

What is the probability distribution of occurring the all heads in a toss of three coins?: 0.25; 0; None of the choices; 0.1255; 1 0.1255

Given the following sample data, compute for the true mean. The answer should be rounded off to one decimal place. 3 5 5 5 6 6 8 8 13 15 17 30 10.8

How do you determine the value of the mean,: Sum each possible outcome of the random variables X by its associated probability and the take the product of all possible values of X.; None of the choices; Multiply each possible outcome of the random variables X by its associated probability and the take the sum over all possible values of X.; Multiply each possible outcome of the random variables X by its associated probability and the take the square root of the sum of all possible values of X. Multiply each possible outcome of the random variables X by its associated probability and the take the sum over all possible values of X.

This are numbers that summarizes data from a sample: Parameter; Sampling Error; Statistics; Sample Distribution of sample means; Standard Deviation; Population Mean; Mode; Standard Curve; Sample; Population; Median; Distribution Error; Deviation Error; Standard deviation of the distribution of the sample means; Random Sample; Mean; Sample Statistics

Which of the following is not a characteristics of a normal distribution.: None of the choices; Perfectly asymmetric; Mount-shaped distribution; Bell-shaped Perfectly asymmetric

It is the measure of how many standard deviations below or above the population mean.: Median; Normal Distribution Measurement; Empirical Rule; Z-score Z-score

Salary, scores and age are examples of \_\_\_\_\_\_\_\_\_\_\_\_ random variables. Continuous

Identify whether each example describes a random sample. Answer with Yes or No A survey company collects information on businessman in Metro Manila on who will they vote for president on the next election. Yes

Identify if the random variable is a DISCRETE or CONTINUOUS. Total number of volunteers in a community DISCRETE

In a normal curve, the bigger the values of standard deviation results to a: wider curve; straight live curve; skewed to the right; narrower curve; skewed to the left wider curve

Which of the following is CORRECT about Sample Space: Sample space should be always be a number from zero to one.; Sample space are possible outcomes; Sample space is a subset of events.; Sample space is also known as probability mass function. Sample space are possible outcomes

Assuming z-score is -1, which of the following statement is TRUE.: All values are less than the mean.; All values are equal to the z-score; All values are equal to the mean.; All values are greater than the mean. All values are less than the mean.

It is the measure of how many standard deviations below or above the population mean.: Normal Distribution Measurement; Z-score; Empirical Rule; Median Z-score

Which of the following statement is TRUE.: Non-countable values are called discrete variables; Infinite numbers are considered discrete variables.; Countable number of values are called discrete variables; All of the statements are TRUE. Countable number of values are called discrete variables

True or False: Parameters are numbers that summarizes data for an entire population TRUE

True or False: Sample Distribution of sample means is the the distribution that describes the spread of the means of multiple samples from the sample population TRUE

Identify if the random variable is a DISCRETE or CONTINUOUS. Number of winning tournaments of a varsity team DISCRETE

The probability distribution of a discrete random variable is a graph, a table or a formula that specifies the probability associated with each possible value that the random variable can assume.: The statement is INCORRECT. The word “graph and formula” should not be included in the statement.; The statement is INCORRECT. The word “graph” should not be included in the statement.; The statement is INCORRECT. The word “formula” should not be included in the statement.; The statement is ALWAYS CORRECT. The statement is ALWAYS CORRECT.

The range of probability is: can be any number (positive or negative); negative 1 to positive 1; from zero to any positive number; from zero to 1 from zero to 1   
  
Which of the following is incorrect?: Probability distribution is used to compute discrete random variables; Probability distribution equals to zero.; Probability distribution is used to compute continuous random variables; Probability distribution equals to one.; None of the choices Probability distribution equals to zero.

Assuming z-score is -1, which of the following statement is TRUE.: All values are equal to the mean.; All values are equal to the z-score; All values are less than the mean.; All values are greater than the mean. All values are less than the mean.

Normal Distribution Curve is also called: Basic Curve; Arc-Shaped Curve; Bell Curve; All of the choices Basic Curve

Identify whether each example describes a random sample. Answer with Yes or No. A teacher conducts examination to all his students. No

Identify if the random variable is a DISCRETE or CONTINUOUS. Internet speed in an office CONTINUOUS

Given the following mean, compute for the Mean of Means. The answer should be rounded off to the nearest hundredths. 3.2 3.6 3.9 9.2 1.65

True or False: The larger the sample size the closer the sampling distribution was to a normal distribution TRUE

Given the set of data: 1, 1, 2, 2, 3, 3, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 Find the lower quartile : 8; 0; 3,4,5,6,7,8,9,10,11,12,; 3 8

Identify if the random variable is a DISCRETE or CONTINUOUS. Number of students in a University DISCRETE

In a given experiment, the sum of all probabilities is: can be any number (positive or negative); One; Zero; All positive numbers One

This is states that the percentages of data in a normal distribution within 1,2 and 3 standard deviations.: Empirical Rule; None of the choices; Normal quantile plot; Z score Empirical Rule

Salary, scores and age are examples of \_\_\_\_\_\_\_\_\_\_\_\_ random variables. Continuous

Two dice is rolled and the sum of face up is being recorded and represented as X. What is P(x <= 5)? 10

A fair six sided dice is tossed. The player loses 5 pesos if the result is “1”, and loses P5 pesos if the result is a “6”, the rest of the numbers, player wins P10. Which of the following table best describes the problem? : ; None of the choices; ; https://lh3.googleusercontent.com/tD3u9CKStA-sKqaIBX8ePUI_ixodeyECAdkyPQu8ZOpG76_fIg5Dph5_ZOAz_0o-Ib9ybg=s170

The sum of all the probabilities P(X = x) for all possible values of a discrete random variable X must equal to \_\_\_\_\_\_. 1

Given the set of data: 1,1, 2, 2, 3, 3, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 Find the upper quartile : 18; 13,14,15,14,15,16,17,18,19,20,21,22; 22; 0 18

The data set that approximates a normal distribution is located at the left side of the curve wherein mean is greater than median.: None of the choices.; The statement is INCORRECT; The statement is ALWAYS TRUE.; The statement is SOMETIMES TRUE. The statement is INCORRECT

Given the data set 10,11,11,12,12,12,13,13,13,13,24,24,14,15,15,16, how many numbers are in the lower quartile?: 0; 4; 6; 1 4

Identify whether each example describes a random sample. Answer with Yes or No Selects all areas in the Philippines who are affected by typhoon and with 5th and 6th income class. Yes

Given the data set 10,11,11,12,12,12,13,13,13,13,24,24,14,15,15,16, how many numbers are in the lower quartile?: 1; 4; 6; 0 4

It is computed as the population standard deviation divided by the square root of the sample size: Random Sample; Standard Deviation; Median; Parameter; Standard deviation of the distribution of the sample means; Deviation Error; Sample; Mean; Population Mean; Sample Distribution of sample means; Sampling Error; Sample; Statistics; Mode; Standard Curve; Distribution Error; Population Standard deviation of the distribution of the sample means

Identify whether each example describes a random sample. Answer with Yes or No. The speed of internet in all areas in the Visayas Region. Yes

This are numbers that summarizes data for an entire population: Mean; Random Sample; Mode; Standard deviation of the distribution of the sample means; Deviation Error; Parameter; Standard Curve; Statistics; Population; Population Mean; Sample; Median; Sampling Error; Sample Distribution of sample means; Standard Deviation; Distribution Error; Sample Parameter

True or False: The Greek letter alpha represents the mean. False

It is measure of the number of standard deviations a particular data value: Z score; Normal quantile plot; None of the choices; Empirical Rule Z score

True or False: In Statistics, variance is defined as the number of times an outcome can occur compared to all possible outcomes. False

Normal Distribution Curve is also called: Normal Curve; Arc-Shaped Curve; All of the choices; Basic Curve Normal Curve

Identify if the random variable is a DISCRETE or CONTINUOUS. Mobile data consumed by a telephone subscriber

CONTINUOUS Identify whether each example describes a random sample. Answer with Yes or No Renmel closes his eyes, opens a book and randomly points to a word on the page. She repeats the process for 30 times. No

The distribution that describes the spread of the means of multiple samples from the sample population: Population Mean; Distribution Error; Standard deviation of the distribution of the sample means; Sample Distribution of sample means; Deviation Error; Statistics; Standard Deviation; Parameter; Sampling Error; Mode; Sample; Mean; Standard Curve; Population; Sample; Median; Random Sample Sample Distribution of sample means

Given the following mean, compute for the Mean of Means. The answer must have two decimal places. 4.5, 9.2, 9.1, 8.4 2.60

Who is the famous mathematician where the normal distribution curve was named after?: William Gosset ; Carl Friedrich Gauss ; John Tukey ; Ronald Fisher Carl Friedrich Gauss

True or False: Sample Distribution of sample means is the the distribution that describes the spread of the means of multiple samples from the sample population TRUE

Which of the following random activity would you define as a discrete random variable?: Height of students enrolled in an online course.; Wind speed during typhoon.; None of the choices.; Distance travelled of a tourist bus.; Depth of building excavation. None of the choices.

Which of the following statement is TRUE.: All of the statements are TRUE.; Countable number of values are called discrete variables; Non-countable values are called discrete variables; Infinite numbers are considered discrete variables. Countable number of values are called discrete variables

Which of the following is CORRECT about Sample Space: Sample space is a subset of events.; Sample space should be always be a number from zero to one.; Sample space is also known as probability mass function.; Sample space are possible outcomes Sample space are possible outcomes

Given the set of data: 1, 1, 2, 2, 3, 3, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 Find the lower quartile : 3; 0; 8; 3,4,5,6,7,8,9,10,11,12, 8

Identify if the random variable is a DISCRETE or CONTINUOUS. Internet speed in an office CONTINUOUS

Given the following mean, compute for the Mean of Means. The answer should be rounded off to the nearest hundredths. 3.2 3.6 3.9 9.2 1.65

True or False: Sampling Error is the degree of error expected for a given sample design TRUE Two dice is rolled and the sum of face up is being recorded and represented as X. What is P(x <= 5)? 10

Which of the following is incorrect?: None of the choices; Probability distribution is used to compute discrete random variables; Probability distribution is used to compute continuous random variables; Probability distribution equals to one.; Probability distribution equals to zero. Probability distribution equals to zero. This tells what the possible values of X and how probabilities are assigned to these values. Probability Distribution equals to zero

Normal Distribution Curve is also called: Basic Curve; All of the choices; Arc-Shaped Curve; Bell Curve Basic Curve

Find the median of the following data set. 11, 13, 15, 17, 19, 21, 22, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 51, 53, 55, 57, 59 : 36.45; 30; 31; 24 31

Identify if the random variable is a DISCRETE or CONTINUOUS. Speed of a tropical storm in the Philippines CONTINUOUS

Given the set of data: 1,1, 2, 2, 3, 3, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 Find the upper quartile : 18; 0; 22; 13,14,15,14,15,16,17,18,19,20,21,22 18

Find the median of the following data set. 44, 46, 29, 39, 59, 59, 39: 44; (44 + 46 + 29 + 39 + 59 + 59 + 39)/2; 39; (44 + 46 + 29 + 39 + 59 + 59 + 39)/7 39

It is also called 68-95-99.7 Rule.: Empirical Rule; None of the choices; Z score Rule; Variance Rule Empirical Rule

Use to check the normality of a distribution: Normal quantile plot; Empirical Rule; Z score; None of the choices Normal quantile plot

True or False: Random distribution is the process of assigning a number to each member of the population FALSE

Identify whether each example describes a random sample. Answer with Yes or No. Collects the number of students who rides on the train. Yes

How do you determine the value of the mean,: Multiply each possible outcome of the random variables X by its associated probability and the take the sum over all possible values of X.; Sum each possible outcome of the random variables X by its associated probability and the take the product of all possible values of X.; Multiply each possible outcome of the random variables X by its associated probability and the take the square root of the sum of all possible values of X.; None of the choices Multiply each possible outcome of the random variables X by its associated probability and the take the sum over all possible values of X.   
  
A curve is said to be symmetric if all data points lies at the right side of the curve.  
A: false   
  
As the confidence interval for a given statistic increases in length, the confidence level decreases.  
A: false

The mean of the normal distribution is: always equal to one; always equal to zero; should always be a positive number; greater than or equal to zero always equal to zero

If the standard deviation of a population is 300, and samples of 25 units each are taken, what is the Standard deviation of the distribution of the sample means? 60

True or False: Random sample happened when data is collected in no certain order TRUE

In a normal curve, the bigger the values of standard deviation results to a: wider curve; narrower curve; skewed to the right; skewed to the left; straight live curve wider curve

True or False: The larger the sample size the closer the sampling distribution was to a normal distribution TRUE

True or False: The Greek letter alpha represents the mean. False

True or False: As the sample size increases, the standard error increases. FALSE True or False: Mean is the sum of all possible values of random variables. False

Identify whether each example describes a random sample. Answer with Yes or No Selects all areas in the Philippines who are affected by typhoon and with 5th and 6th income class. Yes

In an IT Certification Examination, the mean was 75 and the standard deviation was 5. If Pam z-scored is 1.5, what was her score in the examination?: 82.50; 487.50; None of the choices; 117.50 82.50

It is a part of population intended to represent a population as a whole.: Median; Sample; Mean; Mode; Sample; Standard Deviation; Population Mean; Standard Curve; Deviation Error; Standard deviation of the distribution of the sample means; Parameter; Statistics; Population; Random Sample; Distribution Error; Sample Distribution of sample means; Sampling Error Sample

Normal Distribution Curve is also called: Bell Curve; Basic Curve; Arc-Shaped Curve; All of the choices Basic Curve

Given the following mean, compute for the Mean of Means. The answer must have two decimal places. 4.5, 9.2, 9.1, 8.4 2.60

True or False: Sampling Error is the degree of error expected for a given sample design TRUE

Assuming z-score is 1, which of the following statement is TRUE.: All values are equal to the mean.; All values are greater than the mean.; All values are equal to the z-score; All values are less than the mean. All values are greater than the mean.

Identify if the random variable is a DISCRETE or CONTINUOUS. Time travelled by an astronaut CONTINUOUS

The process of assigning a number to each member of the population: Random Sample; Population Mean; Median; Sample; Standard Curve; Standard deviation of the distribution of the sample means; Sample; Sample Distribution of sample means; Mean; Distribution Error; Sampling Error; Population; Parameter; Statistics; Standard Deviation; Deviation Error; Mode Random Sample

Salary, scores and age are examples of \_\_\_\_\_\_\_\_\_\_\_\_ random variables. Continuous

This is states that the percentages of data in a normal distribution within 1,2 and 3 standard deviations.: Normal quantile plot; Empirical Rule; Z score; None of the choices Empirical Rule

Which of the following statement is CORRECT?: A discrete variable is a random variable where data can take infinitely many variables; A continuous random variable assigns a whole number to each possible outcome of an experiment; A discrete variable are countable number of possible values; Continuous random variables are finite numbers A discrete variable are countable number of possible values

Consider the given the probability distribution What is the variance? : 2.466; 1.233; 1.99 ; 1.44 1.99

It is the difference between a sample statistic used to estimate a population parameter and the actual but unknown value of the parameter: Population Mean; Sample Distribution of sample means; Sample; Distribution Error; Population; Mean; Sampling Error; Standard deviation of the distribution of the sample means; Sample; Random Sample; Parameter; Standard Curve; Median; Deviation Error; Mode; Standard Deviation; Statistics Sampling Error

True or False: People whose names were drawn out of the survey is an example of a random sample TRUE

Given the set of data: 1, 1, 2, 2, 3, 3, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 Find the lower quartile : 8; 0; 3; 3,4,5,6,7,8,9,10,11,12, 8

Given the set of data: 1,1, 2, 2, 3, 3, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 Find the upper quartile : 18; 13,14,15,14,15,16,17,18,19,20,21,22; 22; 0 18

A continuous random variable assigns a whole number to each possible outcome of an experiment.: None of the choices; True; False; The statement has insufficient information. True

t is the difference between a sample statistic used to estimate a population parameter and the actual but unknown value of the parameter: Statistics; Sample Distribution of sample means; Standard deviation of the distribution of the sample means; Standard Curve; Sample; Standard Deviation; Sampling Error; Mode; Population; Deviation Error; Random Sample; Median; Parameter; Mean; Population Mean; Distribution Error; Sample Sampling Error

1. Given the data set, find the Mean Value or Expected value (round off your answer to the nearest tenths): 4.2

Identify whether each example describes a random sample. Answer with Yes or No Renmel closes his eyes, opens a book and randomly points to a word on the page. She repeats the process for 30 times. No

Normal Distribution Curve is also called: Basic Curve; Arc-Shaped Curve; Normal Curve; All of the choices Normal Curve

True or False: The bigger the sample size, the more closely the samples will be clustered around the true value. TRUE

Identify if the random variable is a DISCRETE or CONTINUOUS. Number of winning tournaments of a varsity team DISCRETE

This are numbers that summarizes data from a sample: Distribution Error; Population; Parameter; Sample Distribution of sample means; Deviation Error; Population Mean; Statistics; Sampling Error; Sample; Mode; Standard Curve; Random Sample; Median; Standard deviation of the distribution of the sample means; Sample; Standard Deviation; Mean Statistics

Identify if the random variable is a DISCRETE or CONTINUOUS. Internet speed in an office CONTINUOUS

The data set that approximates a normal distribution is located at the left side of the curve wherein mean is greater than median.: The statement is ALWAYS TRUE.; The statement is SOMETIMES TRUE.; None of the choices.; The statement is INCORRECT The statement is INCORRECT

The range of probability is: can be any number (positive or negative); from zero to any positive number; negative 1 to positive 1; from zero to 1 from zero to 1

Identify whether each example describes a random sample. Answer with Yes or No. The speed of internet in all areas in the Visayas Region. Yes

Identify if the random variable is a DISCRETE or CONTINUOUS. Total number of volunteers in a community DISCRETE

Find the median of the following data set. 11, 13, 15, 17, 19, 21, 22, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 51, 53, 55, 57, 59 : 24; 31; 36.45; 30 31

In an IT Certification Examination, the mean was 50 and the standard deviation was 3. If Pam z-scored is 1, what was her score in the examination?: 80.50; None of the choices; 53.00; 82.50 53.00

Find the median of the following data set. 44, 46, 29, 39, 59, 59, 39: 44; 39; (44 + 46 + 29 + 39 + 59 + 59 + 39)/7; (44 + 46 + 29 + 39 + 59 + 59 + 39)/2 39

Given the following sample data, compute for the true mean. The answer must have two decimal places. 1 1 1 2 3 4 5 5 5 8 8 8 8 4.53

True or False: Standard deviation of the distribution of the sample means is computed as the population standard deviation multiplied by the square root of the sample size. FALSE

Which one of these variables is a not continuous random variable?: The number of volunteers in a community; The number of attendees in an Information Technology conference.; The tuition fee enrolled in different universities; The number of senators elected in the Philippines The number of volunteers in a community

Given the following table, what is the correct computation to find mean? : (0.30+0.20+0.10)/(0+1+2) ; (0+1+2)(0.30+0.20+0.10) ; (0)(0.30) + (1)(0.20) + (2)(0.10); (0.30+0.20+0.10)/3; None of the choices None of the choices

It is the measure of how many standard deviations below or above the population mean.: Normal Distribution Measurement; Z-score; Median; Empirical Rule Z-score

Identify whether each example describes a random sample. Answer with Yes or No. Select all 100 poor households in a community in areas in the Philippines affected by the earthquake. Yes

Identify if the random variable is a DISCRETE or CONTINUOUS. Weight of students in a university CONTINUOUS

Identify whether each example describes a random sample. Answer with Yes or No A survey company collects information on businessman in Metro Manila on who will they vote for president on the next election. Yes

True or False: As the sample size increases, the standard error increases. FALSE Identify if the random variable is a DISCRETE or CONTINUOUS. Mobile data consumed by a telephone subscriber CONTINUOUS

True or False: People whose names were drawn out of the survey is an example of a random sample TRUE

In a given experiment, the sum of all probabilities is: One; can be any number (positive or negative); Zero; All positive numbers One

Which of the following statement is CORRECT?: A discrete variable are countable number of possible values; A discrete variable is a random variable where data can take infinitely many variables; Continuous random variables are finite numbers; A continuous random variable assigns a whole number to each possible outcome of an experiment A discrete variable are countable number of possible values

The weighted average of the possible values of random variables.: Mode; Median; Mean; Standard Deviation; Variance Mean

The standard deviation of the normal distribution is: always equal to zero; greater than or equal to zero; always equal to one; should always be a positive number always equal to one

Consider the given the probability distribution What is the variance? : 1.233; 1.99 ; 1.44 ; 2.466 1.99

True or False: One of the most important characteristics of any probability distribution is the mean. True

Given the data set 10,11,11,12,12,12,13,13,13,13,24,24,14,15,15,16, how many numbers are in the lower quartile?: 1; 0; 4; 6 4

The mean of the normal distribution is: always equal to zero; should always be a positive number; always equal to one; greater than or equal to zero always equal to zero

What is the probability distribution of occurring the all heads in a toss of three coins?: 1; None of the choices; 0.1255; 0.25; 0 0.1255 What is the probability of getting all head when a three coins are tossed? 1/8

Normal Distribution Curve is also called: Arc-Shaped Curve; Normal Curve; Basic Curve; All of the choices Normal Curve

Normal Distribution Curve is also called: Arc-Shaped Curve; All of the choices; Basic Curve; Bell Curve Basic Curve

True or False: Random distribution is the process of assigning a number to each member of the population FALSE

Identify whether each example describes a random sample. Answer with Yes or No The manager chooses 30 employees randomly from a department. Yes

Find the median of the following data set. 11, 13, 15, 17, 19, 21, 22, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 51, 53, 55, 57, 59 : 24; 30; 31; 36.45 31

Countless number of values are also known as \_\_\_\_\_\_\_\_\_\_\_\_\_ variables. Continuous It is computed as the population standard deviation divided by the square root of the sample size: Standard deviation of the distribution of the sample means; Deviation Error; Sampling Error; Mean; Standard Deviation; Mode; Statistics; Sample; Median; Random Sample; Population; Standard Curve; Sample Distribution of sample means; Population Mean; Sample; Parameter; Distribution Error Standard deviation of the distribution of the sample means

How many possible outcomes when you simultaneously toss three fair coins. 8

It is the measure of how many standard deviations below or above the population mean.: Empirical Rule; Normal Distribution Measurement; Z-score; Median Z-score

Given the set of data: 1,1, 2, 2, 3, 3, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 Find the upper quartile : 0; 18; 22; 13,14,15,14,15,16,17,18,19,20,21,22 18

Two dice is rolled and the sum of face up is being recorded and represented as X. What is P(x <= 5)? 10

Identify whether each example describes a random sample. Answer with Yes or No. Collects the election results in all areas in the Philippines during election No

How many regions can be found at the left side of the normal distribution curve?: 4; 2; 1; 3 3

True or False: The probability of an outcome that all heads face up when fairly tossing three coin is 3/8. False

Given the data set 10,11,11,12,12,12,13,13,13,13,24,24,14,15,15,16, how many numbers are in the lower quartile?: 4; 0; 1; 6 4

This tells what the possible values of X and how probabilities are assigned to these values. Probability Distribution

Which of the following applies to a normal distribution?: Mean is greater than Median.; Median is greater than Mean.; None of the choices; Data is exactly equal to the mean.; Exactly ½ of the data is above the mean and ½ of data is below.

Exactly ½ of the data is above the mean and ½ of data is below.

The weighted average of the possible values of random variables.: Mode; Median; Variance; Standard Deviation; Mean Mean

Which of the following is not a characteristics of a normal distribution.: Bell-shaped; None of the choices; Perfectly asymmetric; Mount-shaped distribution Perfectly asymmetric

Identify if the random variable is a DISCRETE or CONTINUOUS. Number of proposed thesis in a university DISCRETE

Find the median of the following data set. 44, 46, 29, 39, 59, 59, 39: 44; (44 + 46 + 29 + 39 + 59 + 59 + 39)/7; 39; (44 + 46 + 29 + 39 + 59 + 59 + 39)/2 39

Identify whether each example describes a random sample. Answer with Yes or No The manager chooses 30 employees randomly from a department. Yes

True or False: Parameters are numbers that summarizes data for an entire population TRUE

The probability distribution of a discrete random variable is a graph, a table or a formula that specifies the probability associated with each possible value that the random variable can assume.: The statement is INCORRECT. The word “graph” should not be included in the statement.; The statement is INCORRECT. The word “formula” should not be included in the statement.; The statement is INCORRECT. The word “graph and formula” should not be included in the statement.; The statement is ALWAYS CORRECT. The statement is ALWAYS CORRECT.

What is the common symbol for the mean?: ∑; Α; Ω; µ µ

Normal Distribution Curve is also called: Bell Curve; All of the choices; Basic Curve; Arc-Shaped Curve Basic Curve

Identify whether each example describes a random sample. Answer with Yes or No. Select all 100 poor households in a community in areas in the Philippines affected by the earthquake. Yes

What is the probability distribution of occurring the all heads in a toss of three coins?: 0.25; 0; 0.1255; 1; None of the choices 0.1255

It is also called 68-95-99.7 Rule.: Z score Rule; Empirical Rule; Variance Rule; None of the choices Empirical Rule

The standard deviation of the normal distribution is: greater than or equal to zero; always equal to one; always equal to zero; should always be a positive number always equal to one

It is the difference between a sample statistic used to estimate a population parameter and the actual but unknown value of the parameter: Mean; Standard Deviation; Random Sample; Sampling Error; Standard deviation of the distribution of the sample means; Sample Distribution of sample means; Median; Parameter; Population Mean; Mode; Sample; Standard Curve; Population; Distribution Error; Deviation Error; Sample; Statistics Sampling Error

It is the degree of error expected for a given sample design: Population; Random Sample; Standard deviation of the distribution of the sample means; Median; Sampling Error; Sample Distribution of sample means; Sample; Deviation Error; Population Mean; Standard Deviation; Distribution Error; Standard Curve; Sample; Parameter; Statistics; Mode; Mean Sampling Error

The distribution that describes the spread of the means of multiple samples from the sample population: Population; Sample; Sample; Sample Distribution of sample means; Deviation Error; Standard Deviation; Sampling Error; Distribution Error; Median; Mode; Standard deviation of the distribution of the sample means; Standard Curve; Population Mean; Statistics; Random Sample; Mean; Parameter Sample Distribution of sample means  
  
The distribution that describes the spread of the means of multiple samples from the sample population. Sample Distribution of sample means

Identify whether each example describes a random sample. Answer with Yes or No Shake a bag of colored balls, reach in and select a marble with eyes closed. Yes

True or False: The larger the sample size the closer the sampling distribution was to a normal distribution TRUE

A fair six sided dice is tossed. The player loses 5 pesos if the result is “1”, and loses P5 pesos if the result is a “6”, the rest of the numbers, player wins P10. Which of the following table best describes the problem? : None of the choices; ; ; https://lh3.googleusercontent.com/tD3u9CKStA-sKqaIBX8ePUI_ixodeyECAdkyPQu8ZOpG76_fIg5Dph5_ZOAz_0o-Ib9ybg=s170

In an IT Certification Examination, the mean was 50 and the standard deviation was 3. If Pam z-scored is 1, what was her score in the examination?: 53.00; 80.50; None of the choices; 82.50 53.00

Identify whether each example describes a random sample. Answer with Yes or No. Collects the number of students who rides on the train. Yes

Identify whether each example describes a random sample. Answer with Yes or No. Each audience in a game show is assigned a number from 111 to 666 and roll three standard dice to choose random contestants. Yes

What is the probability of getting the same numbers on 3 dice when they are thrown simultaneously? 1

Find the median of the following data set. 44, 46, 29, 39, 59, 59, 39: (44 + 46 + 29 + 39 + 59 + 59 + 39)/2; 44; (44 + 46 + 29 + 39 + 59 + 59 + 39)/7; 39 39

True or False: In Statistics, variance is defined as the number of times an outcome can occur compared to all possible outcomes. False

Assuming z-score is 1, which of the following statement is TRUE.: All values are less than the mean.; All values are equal to the z-score; All values are equal to the mean.; All values are greater than the mean. All values are greater than the mean.

The range of probability is: from zero to any positive number; negative 1 to positive 1; can be any number (positive or negative); from zero to 1 from zero to 1

In a normal distribution curve,: Mean is equal to Median; Mean is equal to Median and Mode; Mean is equal to Mode; None of the choices Mean is equal to Median and Mode

True or False: Variance is the degree to which values of a random variable differ from the expected value. False

True or False: To determine the value of the mean, multiply each possible outcome of the random variables X by its associated probability and the take the sum over all possible values of X. True

It is also called 68-95-99.7 Rule.: Variance Rule; None of the choices; Z score Rule; Empirical Rule Empirical Rule

The probability distribution of a discrete random variable is a graph, a table or a formula that specifies the probability associated with each possible value that the random variable can assume.: The statement is INCORRECT. The word “formula” should not be included in the statement.; The statement is ALWAYS CORRECT.; The statement is INCORRECT. The word “graph and formula” should not be included in the statement.; The statement is INCORRECT. The word “graph” should not be included in the statement. The statement is ALWAYS CORRECT.

True or False: Mean of means is the sum of all means multiplied by the number of means FALSE

Identify if the random variable is a DISCRETE or CONTINUOUS. Number of proposed thesis in a university DISCRETE

Identify whether each example describes a random sample. Answer with Yes or No. Select all 100 poor households in a community in areas in the Philippines affected by the earthquake. Yes

Identify whether each example describes a random sample. Answer with Yes or No The manager chooses 30 employees randomly from a department. Yes

Identify if the random variable is a DISCRETE or CONTINUOUS. Internet speed in an office CONTINUOUS

If the standard deviation of a population is 300, and samples of 25 units each are taken, what is the Standard deviation of the distribution of the sample means? 60

Identify whether each example describes a random sample. Answer with Yes or No Select all registered voters in a community whose family income is below 10,000 pesos. Yes

Which of the following random activity would you define as a discrete random variable?: Wind speed during typhoon.; Depth of building excavation.; Distance travelled of a tourist bus.; None of the choices.; Height of students enrolled in an online course. None of the choices.

The standard deviation of the normal distribution is: always equal to one; should always be a positive number; greater than or equal to zero; always equal to zero always equal to one What is the probability of getting the same numbers on 3 dice when they are thrown simultaneously? 1

Consider the given the probability distribution What is the variance? : 1.99 ; 1.44 ; 1.233; 2.466 1.99

Identify whether each example describes a random sample. Answer with Yes or No Shake a bag of colored balls, reach in and select a marble with eyes closed. Yes

Consider the given the probability distribution The value of the mean is \_\_\_\_\_\_\_\_. : 4.100 ; 1.233 ; 2.466; 0.082 4.100

A continuous random variable assigns a whole number to each possible outcome of an experiment.: None of the choices; False; True; The statement has insufficient information. True

A representative subset of a population: Random Sample; Deviation Error; Standard Curve; Population Mean; Sample Distribution of sample means; Standard deviation of the distribution of the sample means; Distribution Error; Median; Sampling Error; Mean; Population; Sample; Sample; Standard Deviation; Statistics; Parameter; Mode Sample

Which of the following statement is TRUE.: All of the statements are TRUE.; Non-countable values are called discrete variables; Countable number of values are called discrete variables; Infinite numbers are considered discrete variables. Countable number of values are called discrete variables

The process of assigning a number to each member of the population: Population Mean; Parameter; Sampling Error; Standard Deviation; Sample; Distribution Error; Statistics; Random Sample; Mean; Sample Distribution of sample means; Standard Curve; Sample; Mode; Deviation Error; Median; Standard deviation of the distribution of the sample means; Population Random Sample

Find the median of the following data set. 44, 46, 29, 39, 59, 59, 39: 39; (44 + 46 + 29 + 39 + 59 + 59 + 39)/2; (44 + 46 + 29 + 39 + 59 + 59 + 39)/7; 44 39

Identify whether each example describes a random sample. Answer with Yes or No. Collects the number of students who rides on the train. Yes

True or False: Mean of means is the sum of all means multiplied by the number of means FALSE

The data set that approximates a normal distribution is located at the left side of the curve wherein mean is greater than median.: The statement is INCORRECT; The statement is SOMETIMES TRUE.; None of the choices.; The statement is ALWAYS TRUE. The statement is INCORRECT

It is the measure of how many standard deviations below or above the population mean.: Empirical Rule; Median; Z-score; Normal Distribution Measurement Z-score

Find the median of the following data set. 11, 13, 15, 17, 19, 21, 22, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 51, 53, 55, 57, 59 : 36.45; 31; 24; 30 31

Which of the following is CORRECT about Sample Space: Sample space is a subset of events.; Sample space are possible outcomes; Sample space is also known as probability mass function.; Sample space should be always be a number from zero to one. Sample space are possible outcomes

True or False: The probability of an outcome that all heads face up when fairly tossing three coin is 3/8. False

Which of the following random activity would you define as a discrete random variable?: Depth of building excavation.; Wind speed during typhoon.; None of the choices.; Distance travelled of a tourist bus.; Height of students enrolled in an online course. None of the choices.

How many regions can be found at the left side of the normal distribution curve?: 3; 2; 4; 1 3

Identify if the random variable is a DISCRETE or CONTINUOUS. Internet speed in an office CONTINUOUS

Given the data set 10,11,11,12,12,12,13,13,13,13,24,24,14,15,15,16, how many numbers are in the lower quartile?: 0; 1; 6; 4 4

Identify if the random variable is a DISCRETE or CONTINUOUS. Mobile data consumed by a telephone subscriber CONTINUOUS

Who is the famous mathematician where the normal distribution curve was named after?: Carl Friedrich Gauss ; John Tukey ; Ronald Fisher ; William Gosset Carl Friedrich Gauss

The speed of cars travelling in the road and the water consumption of household are examples of: Continuous Discrete Random Variable; Discrete Continuous Random Variable; Continuous Random Variable; None of the choices; Discrete Random Variables Continuous Random Variable

Given the data set 10,11,11,12,12,12,13,13,13,13,24,24,14,15,15,16, find the upper quartile: 13,13,24,24,14,15,15,16; 24; 16; 14 14

The sum of all the probabilities P(X = x) for all possible values of a discrete random variable X must equal 1.: The statement is NOT ALWAYS TRUE; The statement is FALSE.; The statement is TRUE.; The statement is NOT ALWAYS FALSE The statement is TRUE.

Identify if the random variable is a DISCRETE or CONTINUOUS. Weight of students in a university CONTINUOUS

rue or False: As the sample size increases, the standard error increases. FALSE

In a normal curve, the mean is located at the: midpoint of the curve; intersection of the lowest and highest point; lowest point of the curve; highest point of the curve highest point of the curve

Which of the following is incorrect?: Probability distribution equals to zero.; Probability distribution is used to compute discrete random variables; Probability distribution is used to compute continuous random variables; None of the choices; Probability distribution equals to one. Probability distribution equals to zero.   
  
True or False: Sampling Error is the degree of error expected for a given sample design TRUE Identify whether each example describes a random sample. Answer with Yes or No. Collects the election results in all areas in the Philippines during election No What is the common symbol for the mean?: ∑; Ω; Α; µ µ

True or False: One of the most important characteristics of any probability distribution is the mean. True

True or False: The formula of mean is relative to compute for the variance. True

True or False: Random sample happened when data is collected in no certain order TRUE

Given the set of data: 1, 1, 2, 2, 3, 3, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 Find the lower quartile : 8; 0; 3; 3,4,5,6,7,8,9,10,11,12, 8

True or False: Variance Error is the difference between a sample statistic used to estimate a population parameter and the actual but unknown value of the parameter FALSE

True or False: The probability of an outcome that all heads face up when fairly tossing three coin is 3/8. False

Which of the following statement is TRUE.: Non-countable values are called discrete variables; Countable number of values are called discrete variables; All of the statements are TRUE.; Infinite numbers are considered discrete variables. Countable number of values are called discrete variables

The speed of cars travelling in the road and the water consumption of household are examples of: None of the choices; Discrete Random Variables; Continuous Random Variable; Continuous Discrete Random Variable; Discrete Continuous Random Variable Continuous Random Variable

Identify whether each example describes a random sample. Answer with Yes or No A survey company collects information on businessman in Metro Manila on who will they vote for president on the next election. Yes

Identify whether each example describes a random sample. Answer with Yes or No. A teacher conducts examination to all his students. No The sum of all the prob

abilities P(X = x) for all possible values of a discrete random variable X must equal to \_\_\_\_\_\_. 1

The data set that approximates a normal distribution is located at the left side of the curve wherein mean is greater than median.: The statement is SOMETIMES TRUE.; The statement is ALWAYS TRUE.; The statement is INCORRECT; None of the choices. The statement is INCORRECT

True or False: In Statistics, variance is defined as the number of times an outcome can occur compared to all possible outcomes. False

In a normal distribution curve, data are divided into 3 equal parts.: The statement is FALSE.; The statement is SOMETIMES TRUE depending on the data set.; None of the choices; The statement is TRUE. None of the choices

Identify whether each example describes a random sample. Answer with Yes or No Select all registered voters in a community whose family income is below 10,000 pesos. Yes

Two dice is rolled and the sum of face up is being recorded and represented as X. What is P(x <= 5)? 10

An example of a parameter.: Population Mean; Sample Distribution of sample means; Standard deviation of the distribution of the sample means; Random Sample; Population; Mode; Sample; Median; Mean; Deviation Error; Standard Curve; Statistics; Parameter; Distribution Error; Standard Deviation; Sample; Sampling Error Population Mean

Given the set of data: 1, 1, 2, 2, 3, 3, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 Find the lower quartile : 3,4,5,6,7,8,9,10,11,12,; 3; 8; 0 8

Given the set of data: 1,1, 2, 2, 3, 3, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 How many numbers are in the lower quartile? : 10; 0; 3,4,5,6,7,8,9,10; 6 6

How do you determine the value of the mean,: Multiply each possible outcome of the random variables X by its associated probability and the take the square root of the sum of all possible values of X.; Multiply each possible outcome of the random variables X by its associated probability and the take the sum over all possible values of X.; None of the choices; Sum each possible outcome of the random variables X by its associated probability and the take the product of all possible values of X. Multiply each possible outcome of the random variables X by its associated probability and the take the sum over all possible values of X.

Given the following sample data, compute for the true mean. The answer must have two decimal places. 1 1 1 2 3 4 5 5 5 8 8 8 8 4.53 Find the median of the following data set. 44, 46, 29, 39, 59, 59, 39: 39; 44; (44 + 46 + 29 + 39 + 59 + 59 + 39)/7; (44 + 46 + 29 + 39 + 59 + 59 + 39)/2 39

Identify if the random variable is a DISCRETE or CONTINUOUS. Internet speed in an office CONTINUOUS

This are numbers that summarizes data for an entire population: Parameter; Standard Deviation; Distribution Error; Sample; Population Mean; Median; Mode; Sample; Sampling Error; Standard deviation of the distribution of the sample means; Deviation Error; Random Sample; Standard Curve; Sample Distribution of sample means; Statistics; Population; Mean Parameter

Which of the following applies to a normal distribution?: None of the choices; Median is greater than Mean.; Mean is greater than Median.; Data is exactly equal to the mean.; Exactly ½ of the data is above the mean and ½ of data is below. Exactly ½ of the data is above the mean and ½ of data is below.

Identify if the random variable is a DISCRETE or CONTINUOUS. Total number of volunteers in a community DISCRETE

True or False: Random sample happened when data is collected in no certain order TRUE

Find the median of the following data set. 11, 13, 15, 17, 19, 21, 22, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 51, 53, 55, 57, 59 : 31; 36.45; 30; 24 31

The mean of the normal distribution is: greater than or equal to zero; always equal to one; should always be a positive number; always equal to zero always equal to zero

True or False: The probability variance of a discrete random variable is a graph, a table or a formula that specifies the probability associated with each possible value that the random variable can assume. False

In a normal distribution curve,: Mean is equal to Mode; Mean is equal to Median; None of the choices; Mean is equal to Median and Mode Mean is equal to Median and Mode

The sum of all the probabilities P(X = x) for all possible values of a discrete random variable X must equal to \_\_\_\_\_\_. 1

It is the difference between a sample statistic used to estimate a population parameter and the actual but unknown value of the parameter: Parameter; Mean; Sample; Mode; Distribution Error; Standard deviation of the distribution of the sample means; Median; Sampling Error; Deviation Error; Standard Deviation; Standard Curve; Population; Population Mean; Statistics; Sample Distribution of sample means; Sample; Random Sample Sampling Error

Identify whether each example describes a random sample. Answer with Yes or No. The speed of internet in all areas in the Visayas Region. Yes

It is the number of times an outcome can occur compared to all possible outcomes.: Probability; Standard Deviation; Variance; Mean Probability

Identify if the random variable is a DISCRETE or CONTINUOUS. The brightness of an LED bulb CONTINUOUS

It is also called 68-95-99.7 Rule.: Z score Rule; None of the choices; Empirical Rule; Variance Rule Empirical Rule

This are numbers that summarizes data from a sample: Random Sample; Statistics; Population Mean; Sample; Deviation Error; Population; Standard Deviation; Parameter; Sample Distribution of sample means; Sample; Standard Curve; Mode; Median; Sampling Error; Standard deviation of the distribution of the sample means; Distribution Error; Mean Statistics

Identify if the random variable is a DISCRETE or CONTINUOUS. Internet speed in an office CONTINUOUS

Use to check the normality of a distribution: None of the choices; Normal quantile plot; Z score; Empirical Rule Normal quantile plot

Which of the following statement is TRUE.: All of the statements are TRUE.; Non-countable values are called discrete variables; Countable number of values are called discrete variables; Infinite numbers are considered discrete variables. Countable number of values are called discrete variables

Identify if the random variable is a DISCRETE or CONTINUOUS. Total number of volunteers in a community DISCRETE

Identify if the random variable is a DISCRETE or CONTINUOUS. Mobile data consumed by a telephone subscriber CONTINUOUS

Identify whether each example describes a random sample. Answer with Yes or No Women who volunteer to take a survey on human rights. No

Which one of these variables is a not continuous random variable?: The number of senators elected in the Philippines; The number of volunteers in a community; The tuition fee enrolled in different universities; The number of attendees in an Information Technology conference. The number of senators elected in the Philippines

Identify whether each example describes a random sample. Answer with Yes or No. Collects the number of students who rides on the train. Yes

True or False: Mean is the sum of all possible values of random variables. False

The sum of all the probabilities P(X = x) for all possible values of a discrete random variable X must equal to \_\_\_\_\_\_. 1

Two dice is rolled and the sum of face up is being recorded and represented as X. What is P(x <= 5)? 10

Identify whether each example describes a random sample. Answer with Yes or No A survey company collects information on businessman in Metro Manila on who will they vote for president on the next election. Yes

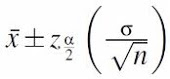
The sum of all the probabilities P(X = x) for all possible values of a discrete random variable X must equal 1.: The statement is FALSE.; The statement is NOT ALWAYS TRUE; The statement is TRUE.; The statement is NOT ALWAYS FALSE The statement is TRUE.

An example of a parameter.: Standard Deviation; Sample; Random Sample; Standard deviation of the distribution of the sample means; Mode; Median; Sampling Error; Standard Curve; Population Mean; Statistics; Parameter; Distribution Error; Deviation Error; Mean; Sample; Sample Distribution of sample means; Population Population Mean

The speed of cars travelling in the road and the water consumption of household are examples of: Discrete Continuous Random Variable; Continuous Random Variable; Continuous Discrete Random Variable; Discrete Random Variables; None of the choices Continuous Random Variable

True or False: Sample Distribution of sample means is the the distribution that describes the spread of the means of multiple samples from the sample population TRUE

1. Given the data set below, compute for the variance. (Round off your answer to the nearest hundredths):   
A: 5.98  
  
The degree of error expected for a given sample design  
A: sampling error  
  
This is defined by two values, between which a population parameter is said to lie.  
A: interval estimate  
  
Which of the following applies to Central Limit Theorem?  
A: Distribution of sample means may be assumed normal as long as sample size is greater than or equal to 30.  
  
These are numbers that summarizes data from a sample.  
A: statistics  
  
The average of the population.  
A: mean  
  
Confidence interval is associated by confidence level  
A: true  
  
In Central Limit Theorem, the mean of the sampling distribution of the mean is equal to the  
A: population mean  
  
Which of the following does describes a T distribution?  
A: all of the choices  
  
In order to apply the Central Limit Theorem, which of the statement applies?  
A: A sample size greater than or equal to 30  
  
Margin of Error is computed as quotient of the standard deviation and the \_\_\_\_\_\_\_\_\_\_\_\_ of the sample size multiplied by the confidence coefficient.  
A: square root  
  
In a normal distribution curve, the total area of the curve is  
A: 1

Number of rooms & employees are examples of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  
A: Discrete Random Variables  
  
What is the formula to calculate the standard deviation of the sampling distribution?  
A: Standard deviation of the population divided by the square root of the sample size  
  
The formula to computer for the confidence interval is?  
A:   
  
The mean of sample should fall \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the lower and upper values of the confidence interval.  
A: within  
  
Which of the following describes a T distribution?  
A: all of the choices  
  
As the confidence interval for a given statistics increases in length,  
A: confidence level increases  
  
T distribution is use to estimate population mean interval for:  
A: Smaller samples  
  
In a normal curve, z-score is \_\_\_\_\_\_\_\_\_\_\_\_\_\_.  
A: Always equal to zero.  
  
Also known as Bell shaped curve.  
A: normal curve  
  
In a normal distribution, the tail of the curve \_\_\_\_\_\_\_\_\_\_ along the horizontal axis.  
A: flatten  
  
Formula to compute for the variance  
A: https://lh3.googleusercontent.com/EDcHhMGNo3idHYVuxByZu4nHIfjUqeCRTnjhgol99FsZxUxCqEgKXDEDvk1DLeQ-UqLLsw=s170  
  
 According to the Empirical Rule, \_\_\_\_\_\_\_\_ % of the sample estimates will fall within one standard error above the population parameter.

The process of assigning a number to each member of the population  
A: Random Sampling

**AMANAMBAWAN**

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