

Statement 1. Factorial notation is the result of multiplying a sequence of descending numbers.

Statement 2. Combination refers to the arrangement of objects with reference to order.

Statement 1 is true; Statement 2 is false

Evaluate 55!

$1.2696 \times 10^{73}$

In how many ways can you arrange 5 people in a circle?

24

In how many ways can you arrange 5 people in a line?

120

Euler's number is equal to

2.71828

$0!$  is equal to

1

Which of the following is incorrectly evaluated

$10! - 9! = 1$

Which is equivalent to  $Q_2$

$P_{50}$

Which can be considered as median?

$Q_2$

Analyze the statement and identify the one depicting two tailed test

What is the probability of getting a score equal to 50?

Analyze the statement and identify the one depicting two tailed test

The probability of getting 10

If the distribution has a kurtosis value which is equal to zero. The distribution is said to be

Mesokurtic

12/12

\*\*\*\*\*

Which statement is true?

Binomial Distribution  Probability of exactly  $x$  successes in  $n$  trials

Which statement is false?

Poisson Distribution  Probability of exactly  $x$  successes in a  $0$  unit  or discrete interval

Which statement is false?

Discrete probability distribution is used to calculate probability for values between intervals.

It is a theoretical concept whose objective is to be able to explain for some variables the reaction between the intervals of its values and their corresponding probabilities.

Normal Distriburion

In a normal distribution,

the random variable  $x$  is normally dispersed with the mean and variance

This is a is a statistical measure that is frequently used to indicate the probability of a specific number of successes occurring from a specific number

of independent trials.  
Binomial Distribution

In this type of distribution, the number of successes is fixed and the number of trials varies. The function calculates the probability of a given number of failures occurring, before a fixed number of successes.  
Negative Binomial Distribution

Identify the probability distribution being described by the statement below  
What is the probability of having exactly 7 tails before 8 heads?  
negative binomial distribution

This is the probability distribution that describes the time between events.  
Exponential Distribution

\_\_\_\_\_ assigns a probability to each measurable subset of the possible outcomes of a random experiment, survey, or procedure of statistical inference.  
Probability Distribution

What do you call a variable whose value is subject to variations due to chance. It can take on a set of possible different values, each with an associated probability.  
random variable

Which of the following is a continuous random variable?  
none of these

12/12

\*\*\*\*\*

Imagine that you are the banker of the game "deal or no deal". Supposing that you are tasked to make an offer worth 30% lower than the mean of the remaining amounts contained in the unopened briefcases. There are only three briefcases left unopened, one chosen by the player and two with the deal or no deal ladies. The remaining amounts are Php1,000,000, Php700,000 and Php100,000. What amount will you offer to the player?  
Php420,000

This is preferred to be used when handling samples which are greater than or equal to 30.  
z-test

This examines whether samples are different and is commonly used when the variances of normal distributions are unknown and when an experiment uses a small sample size.  
T-test

What can you say about the distribution's skewness given the following data  
Mean=20  
Mode = 10  
Median=15  
The distribution is positively skewed

If the probability that  $x = 6$  is 25%, what is the probability that  $x$  will not be equal to 6?  
75%

If the probability that  $x \leq 20$  is 65% and the probability that  $x < 20$  is 20%, what is the probability that  $x \neq 20$ ?  
55%

If the probability that  $x \geq 10$  is 65% and the probability that  $x = 10$  is 20%,

what is the probability that  $x \neq 10$ ?

80%

If the probability that  $x \geq 6$  is 10%. What is the probability that  $x < 6$ ?

90%

A normal deck of playing cards consists of 52 cards. If you will draw one card, what is the probability that you can get a black card?

0.5

If you flip a coin twice, what is the probability of getting at least one tail?

0.75

10/10

\*\*\*\*\*

What can you infer from the following data, 10, 15, 10, 20, 15, 25, 10.

The distribution is platykurtic

Ten people took an employment exam, the following are their scores from a 50-item test

10, 20, 30, 25, 35, 40, 20, 34, 33, 38

What is the population standard deviation?

9.04

The test is applied when you have two categorical variables from a single population. It is used to determine whether there is a significant association between the two variables.

Chi-square Test for Independence

This test is applied when you have one categorical variable from a single population. It is used to determine whether sample data are consistent with a hypothesized distribution.

Chi-square Test for Goodness of Fit

16 BSBA students took a quiz in Business Statistics, five of them got a score of 5; five got a score of 10; five got a score of 15 and the other one was unknown. If the mean score of 16 students is 10, what is the modal score?

10

The variance of the final grades of 50 students is equal to 16, what is the value of standard deviation?

4

There are 10 employees in a small business firm. From these employees, two of them have a salary of Php20,000; three of them receive Php25,000; four of them receive Php30,000; lastly the manager's salary is not given. Supposing that the average salary of the 10 employees is worth Php29,000, what is the range amount of their salaries?

Php35,000

You are in charged of the repacking of goods. There are 2 types of canned sardines, 3 types of rice and 2 types of noodles. How many combinations can you make if you are only allowed to pick one per product?

12

Which statement is false?

Continuous probability distribution is an infinite probability distribution used to find probability for a countable of values.

If there are 20 students currently enrolled BSBA-MIS. In how many ways can elect a president and vice president?

380

Evaluate the formula and identify the correct expression

$f(x)=\text{HYPGEOM.DIST}(3,4,6,9,\text{FALSE})=0.48$

Analyze the excel sheet formula and identify which one does not belong to the group \*walang norm

$f(x)=\text{EXPON.DIST}(9,1/10,\text{FALSE})$

Analyze the excel sheet formula and identify which that does not belong to the group

$f(x)=\text{NORM.DIST}(183,175,9,11,\text{FALSE})$

Analyze the excel sheet formula and identify which that does not belong to the group

$f(x)=\text{NORM.DIST}(183,175,E9,\text{FALSE})$

With a 0.5 probability of success in each of your 5 business investments, what is the probability that you will make profit in exactly 2 of your investments?  
31.25%

The average number of homes sold by the a realty company is 2 homes per day. What is the probability that greater than 3 homes will be sold tomorrow?  
0.14

15/15

This study resource was shared via CourseHero.com