

1. A random variable is assigned numerical values based on the outcomes of an experiment.

True or False

2. For a binomial distribution, each trial has a known number of successes. For ex., a 4 question multiple choice test can only have zero, one, two, three + four successes

True or False

3. To construct a binomial probability dist., the number of trials and the probability of success must be known.

True or False

4. The Poisson prob. distribution is a continuous probability distribution

True or False

5. If we measure the weight of an eggnog carton, the variable is referred to as being a discrete random variable.

True or False

6. If the variance of a probability was computed to be 3.6 grams what is the standard deviation?

0.6

1.9

6.0

12.96

7. — 90% of data on a normal curve lie between 1 and -1 standard deviation points of the mean.
68, 95, 99+

8. — 90% of data on a normal curve lie between 2 and -2 standard deviation points of the mean.

68, 95, 99+

9. _____ 90% of data on a normal curve lie between 3 and -3 standard deviation points of the mean
68, 95, 99+ _____

10. Areas within a continuous probability dist. (the 90%) represent probabilities
True or False

11. Asymptotic means that the normal curve gets closer and closer to the X-axis but never actually touches it.
True or False

12. The mean (μ) divides the normal curve ~~to~~ into two identical halves
True or False

13. The shape of any uniform probability distribution is

- Negatively skewed
- Positively skewed
- Rectangular
- Bell shaped

14. The mean of any uniform probability distribution is

$$(b-a)/2$$

$$(a+b)/2$$

$$\sigma x/n$$

$$n\bar{0}$$

15. At a downtown office of FNB, there are 5 tellers (A, B, C, D + E). How many different samples of 2 tellers are possible?

16. HRC is surveying a sample of 60 firms in order to study health care costs for clients. One of the items tracked is the annual deductible that employees must pay. The state Bureau of Labor reports the mean of this distribution to be \$502 with a population standard deviation of \$100. Calculate the likelihood that the sample mean is between \$477 + \$527.

- . 8132
- . 5327
- . 0254
- . 9476

17. A credit card determined that customers chg. between 100 and 1100 per month. Given the avg. monthly change is uniformly distributed answer the following

What is the avg monthly chg?
600, 720, 645, 585?

Refer to Question 17
↑

18. What is the stand. deviation
of the monthly amt. charged

290.88

288.67

255.75

249.33

19. A group of statistics student
decided to conduct a survey
at their university to find the
avg. (mean) amt. of time students
spend studying per wk. Based
on a random sample, they surveyed
144 student. Stats. showed
that students studied an avg. of
20 hrs per week with a standard
deviation of 10 hours

What is the standard error of the
mean?

.83

1.0

.5

.2

20. What is the probability that a sample
mean would exceed 20 hours per week

1.0

.5

1.96

or can not determine w/
INFO Given