STATISTICS WORKSHEET- 6

Answer Sheet

1. c) The outcome of exam
2. a) Discrete
3. a) pdf
4. c) mean
5. a) variance
6. b) standard deviation
7. c) 0 and 1
8. b) bootstrap
9. b) summarized
10. Boxplots may also depict values that are far outside of the normal range of referred to as outliers. A histogram is a graphical representation of the spread of data points.
11. metrics should always be closely tied to your primary objective.
    Good metrics can be improved. Good metrics measure progress, which means there needs to be room for improvement.
12. 1. State the Research Hypothesis.
    2. State the Null Hypothesis.
    3. Select a probability of error level (alpha level)
    4. Select and compute the test for statistical significance.
    5. Interpret the results.
13. Any type of categorical data won't have a gaussian distribution or lognormal distribution. Exponential distributions - eg. the amount of time that a car battery lasts or the amount of time until an earthquake occurs.
14. Income is the classic example of when to use the median instead of the mean because its distribution tends to be skewed. The median indicates that half of all incomes fall below 27581, and half are above it.
15. The likelihood is the probability that a particular outcome is observed when the true value of the parameter is, equivalent to the probability mass on ; it is not a probability density over the parameter . The likelihood, should not be confused with, which is the posterior probability of given the data.