ASSIGNMENT 6 STATISTICS

1.D
2.A
3.A
4.C
5.C
6.B
7.C
8.B
9.B

10. What is the difference between a boxplot and histogram?

Histograms are a special kind of bar graph that shows a bar for a range of data values instead of a single value. A box plot is a data display that draws a box over a number line to show the interquartile range of the data. The 'whiskers' of a box plot show the least and greatest values in the data set.

11. How to select metrics?

12. How do you assess the statistical significance of an insight?

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. Give examples of data that does not have a Gaussian distribution, nor log-normal.

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. Give an example where the median is a better measure than the mean.

Income is the classic example of when to use the median instead of the mean because its distribution tends to be skewed.

15. What is the Likelihood?

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 .