

STATISTICS 4

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

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

The histogram is a popular graphing tool. It is used to summarize discrete or continuous data that are measured on an interval scale. It is often used to illustrate the major features of the distribution of the data in a convenient form. In the univariate case, box-plots do provide some information that the histogram does not (at least, not explicitly). That is, it typically provides the median, 25th and 75th percentile, min/max that is not an outlier and explicitly separates the points that are considered outliers

11. How to select metrics?

There are few steps to select a metric as prioritize objectives, examine which metric consistently predicts their achievement, and identify which activities influence predictors, in that order and continuously re-evaluate this process to keep up with the times

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

There are number of steps which are as follows

- i. State the Research Hypothesis.
- ii. State the Null Hypothesis.
- iii. Select a probability of error level (alpha level)
- iv. Select and compute the test for statistical significance.
- v. Interpret the results.

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

Duration of a phone car, time until the next earthquake

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

Explicating the Poverty Line, Buying a property, Median Salary

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. Likelihood function is a fundamental concept in statistical inference. It indicates how likely a particular population is to produce an observed sample.