STATISTICS-WORKSHEET-3

ANS-1-

ANS-2-c

ANS-3-a

ANS-4-a

ANS-5-

ANS-6-b

ANS-7-b

ANS-8-d

ANS-9-a

ANS-10-In probability theory and statistics, Bayes' theorem, named after Thomas Bayes, describes the probability of an event, based on prior knowledge of conditions that might be related to the event.

ANS-11-Z-score indicates how much a given value differs from the standard deviation. The Z-score or standard score, is the number of standard deviations a given data point lies above or below mean. Standard deviation is essentially a reflection of the amount of variability within a given dataset.

ANS-12-A t-test is a statistical test that compares the means of two samples. It is used in hypothesis testing, with a null hypothesis that the difference in group means is zero and an alternate hypothesis that the difference in group means is different from zero.

ANS-13-In statistics, a percentile is a term that describes how a score compares to other scores from the same set. While there is no universal definition of percentile, it is commonly expressed as the percentage of values in a set of data scores that fall below a given value.

ANS-14-Analysis of Variance(ANOVA) is a statistical formula used to vompare variances across the means of different groups. A range of scenarios use it to determine if there is any difference between the mmeans of different groups.

ANS-15-ANOVA is helpful for testing three or more variables. It is similar to multiple two-sample t-tests. However, it results in fewer type 1 errors and is appropriate for a range of issues. ANOVA groups differences by comparing the means of each group and includes spreading out the variance into diverse sources.