Statistics WorkSheet\_3

1. B
2. C
3. A
4. A
5. C
6. B
7. B
8. D
9. A
10. What is Bayes' Theorem:

Bayes' Theorem states that the conditional probability of an event, based on the occurrence of another event, is equal to the likelihood of the second event given the first event multiplied by the probability of the first event.

1. What is Z-score:

A z-score is an example of a standardized score. A z-score measures how many standard deviations a data point is from the mean in a distribution.

1. What is t-test? A ***t*test** is a statistical test that is used to compare the means of two groups. It is often used in hypothesis testing to determine whether a process or treatment influences the population of interest, or whether two groups are different from one another.
2. What is Percentile? 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.
3. What is ANOVA? Analysis of variance, or ANOVA, is a statistical method that separates observed variance data into different components to use for additional tests. A one-way ANOVA is used for three or more groups of data, to gain information about the relationship between the dependent and independent variables.
4. How can ANOVA help? ANOVA is helpful for **testing three or more variables**. It is similar to multiple two-sample t-tests. However, it results in fewer type I 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.