

## **WORK SHEET SET 3**

### **STATISTICS**

**1.B**

**2.C**

**3.A**

**4.A**

**5.B**

**6.B**

**7.B**

**8.b**

**9.A**

**10. 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**

**11. A z-score tells you where the score lies on a normal distribution curve. A z-score of zero tells you the values is exactly average while a score of +3 tells you**

**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.**

**13. A percentile (or a centile) is a measure used in statistics indicating the value below which a given percentage of observations in a group**

**14. Analysis of Variance (ANOVA) is a statistical formula used to compare variances across the means (or average) of different groups. A range of scenarios use it to determine if there is any difference between the means of different groups.**

**15. The one-way ANOVA can help you know whether or not there are significant differences between the means of your independent variables (such as the first example: age, sex, income). When you understand how each independent variable's mean is different from the others, you can begin to understand which of them has a connection to your dependent variable (landing page clicks), and begin to learn what is driving that behavior**