STATISTICS WORKSHEET-8

ANSWERS:

1. b. The probability of failing to reject H0 when H1 is true
2. b. null hypothesis
3. d. Type I error
4. b. the t distribution with n - 1 degrees of freedom
5. a. accepting Ho when it is false
6. d. a two-tailed test
7. b. the probability of committing a Type I error
8. a. the probability of committing a Type II error
9. a. $z > z\alpha$
10. c. the level of significance
11. a. level of significance
12. a. Degrees of Freedom
13. ANOVA in SPSS can be used to test for differences between multiple groups on a single continuous outcome variable. It can also be used to test for interactions between two or more independent variables.
14. Assumptions:
    - Independence: The observations in each group must be independent of each other.
    - Normality: The data in each group should be normally distributed.
    - Homogeneity of Variance: The variances of each group should be equal.
    - Random Sampling: The data should be collected using random sampling techniques.
15. Main difference between one-way ANOVA and two-way ANOVA is that one-way ANOVA examines the differences between multiple groups of one independent variable, while two-way ANOVA examines the differences between multiple groups of two independent variables, as well as the interaction between these variables.

16.