STATISTICS WORKSHEET-3

ANS.NO.1= (C)

ANS.NO.2= (B)

ANS.NO.3= (A)

ANS.NO.4= (B)

ANS.NO.5= (C)

ANS.NO.6= (C)

ANS.NO.7= (A)

ANS.NO.8= (A)

ANS.NO.9= (C)

ANS.NO.10=(C)-2.50 is my correct ans.

ANS.NO.11= (C)

ANS.NO.12= (B)

STATISTICS SUBJECTIVE ANS.

ANS.NO.13

The test statistic for a two-sample independent t-test is calculated by taking the difference in the two sample means and dividing by either the pooled or unpooled estimated standard error. The estimated standard error is an aggregate measure of the amount of variation in both groups.

1) The data values are independent.
2) A two-sample independent *t*-test can be run on sample data from a normally distributed numerical outcome variable to determine if its mean differs across two independent groups.
3) **Hypotheses:**
   H_o: The population mean of one group equals the population mean of the other group, or $\mu_1 = \mu_2$
   H_A: The population mean of one group does not equal the population mean of the other group, or $\mu_1 \neq \mu_2$

4) This test can also be conducted with a directional alternate hypothesis:
   H_o: The population mean of one group equals the population mean of the other group, or $\mu_1 = \mu_2$
   H_a: The population mean of one group is greater than the population mean of the other group, or $\mu_1 > \mu_2$

De Degree of freedom: Varies by conditions, but the basic rule of thumb for hand calculations is the smaller of $n_1 - 1$ and $n_2 - 1$, where n is the sample size for each group.

$$t = \frac{\bar{X}_1 - \bar{X}_2}{SE}$$

5) Greens of freedom: Varies by conditions, but the basic rule of thumb for hand calculations is the smaller of $n_1 - 1$ and $n_2 - 1$, where n is the sample size for each group.

$$t = \frac{\bar{X}_1 - \bar{X}_2}{SE}$$

ANS NO.14

The mean difference, or difference in means, measures the absolute difference between the mean value in two different groups. In clinical trials, it gives you an idea of how much difference there is between the averages of the experimental group and control groups.

ANS NO. 15

Where two-sample T-test for independent samples can be used: Comparing the average test scores of two classes from two different schools. Comparing the average weights of two different groups of people. Measuring the difference in height between men and women