Excel Assignment 3
20 points

## Problem \#1 <br> Example on page 299 ( $7^{\text {th }}$ Edition) <br> Example 9.6 on page 302 ( $8^{\text {th }}$ Edition)

Data: 14.26, 16.78, 13.65, 10.83, 12.64, 13.37, 16.20, 14.94
In EXCEL spreadsheet enter the data in column A.
Click on Tools, Data Analysis, Descriptive Statistics, OK.
In the dialogue box, click on input range, highlight the data.
Click on summary statistics and confidence level for mean.
Change the level if necessary. (95\%, $99 \%$ etc.)
Click on OK.
Print only the output. (Please save paper)
Complete the calculation by hand.

Problem \#2
Example on page 330 ( $7^{\text {th }}$ Edition)
Example 10.7 on page 331 (8 ${ }^{\text {th }}$ Edition)
In EXCEL spreadsheet enter the data as follows.
$31.9 \quad 30$
$30.3 \quad 30$
32.130
$31.7 \quad 30$
30.930

Click on Tools, Data Analysis, t-Test: Paired Two Sample for Mean, OK.
In the dialogue box, highlight the data for Variable 1 Range.
Highlight the column of 30's for Variable 2 Range.
Set Hypothesized Mean Difference to 0.
Change Alpha to 0.01 .
Click on OK.
Print the output. (Please save paper)
What you just did is testing hypothesis for mean when sample size is small.
Computer only does the following.
$H_{0}: \mu=\mu_{0}$ Verses $H_{0}: \mu \neq \mu_{0}$

Use the information to complete the problem.

## Problem \#3

Example on page 339 ( $7^{\text {th }}$ Edition)
Example 10.10 on page 340 ( $8^{\text {th }}$ Edition)

In EXCEL spreadsheet enter the data as follows.
205218
220204
200223
210198
201211
Click on tools, Data Analysis, t-Test: Two-Sample Assuming Equal Variances.
In the dialogue box, highlight column 1 for Variable 1 Range.
Highlight the column 2 for Variable 2 Range.
Set Hypothesized Mean Difference to 0 .
Change Alpha to 0.05 .
Click on OK.
Computer only does the following.
$H_{0}: \mu_{1}=\mu_{2}$ verses $H_{0}: \mu_{1} \neq \mu_{2}$
Use the information to complete the problem.

## Problem \#4 <br> Example on page 341 ( $7^{\text {th }}$ Edition) <br> Example 10.11 on page 342 ( $8^{\text {th }}$ Edition)

In EXCEL spreadsheet enter the data as follows.
$45 \quad 36$
$73 \quad 60$
$46 \quad 44$
$124 \quad 119$
$33 \quad 35$
$57 \quad 51$
$83 \quad 77$
$34 \quad 29$
$26 \quad 24$
$17 \quad 11$
Click on tools, Data Analysis, t-Test: Paired Two Sample for Mean.
In the dialogue box, highlight column 1 for Variable 1 Range.
Highlight the column 2 for Variable 2 Range.
Set Hypothesized Mean Difference to 0 .
Change Alpha to 0.05 .
Click on OK.
Computer only does the following.
$H_{0}: \mu_{1}=\mu_{2}$ verses $H_{0}: \mu_{1} \neq \mu_{2}$
Use the information to complete the problem.

