Excel Assignment 3 **20 points**

Problem #1 Example on page 299 (7th Edition) Example 9.6 on page 302 (8th 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 (7th Edition) Example 10.7 on page 331 (8th Edition)

In EXCEL spreadsheet enter the data as follows.

- 31.9 30
- 30.3 30
- 32.1 30
- 31.7 30
- 30.9 30

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 (7th Edition) Example 10.10 on page 340 (8th Edition)

In EXCEL spreadsheet enter the data as follows.

205	218
220	204
200	223
~ ~ ~	400

210 198 201 211

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 Example on page 341 (7th Edition) Example 10.11 on page 342 (8th Edition)

In EXCEL spreadsheet enter the data as follows.

45	36
73	60
46	44
124	119
33	35
57	51
83	77
34	29
26	24
17	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.