

SPSS Helps – Lab Six
One Way ANOVA

Entering the data:

For this lab you can either enter data in the same way that you did for labs two and five or you can retrieve the data sheet from lab two. If you are entering the data at this time you need to define two variables. The first variable (numeric, no decimals) will be for the dependent measure (i.e., the money spent per town). The second variable will identify what geographic group the state belongs to. If you would like, you can also have a variable for town name although that is not necessary for the analysis. If you are retrieving data from lab two go to the **file** menu and then to **open**. Choose the **data** option and make sure that you are looking for the file on the device that you used for saving the data.

Analyzing the data:

Since there are three groups you will need to use a **One way ANOVA** as the statistical test. You will find this by going to the **analyze** command, the **compare means** choice from the pull down menu and **One Way ANOVA** from the side menu. A dialogue box will appear that is similar to the one for a t test for two samples. On the left will be a list of your variables. Transfer the variable name of the dependent measure (the money spent) to the **dependent list** box. Put the variable name that identifies each subject's group (town) in the **Factor** box. There is no need to identify the codes that you have used as there was with a two sample t test.

Now click the **Post Hoc** button so that you can choose post hoc test that will be done. There are two columns of possible tests that you could choose. Put a check mark (by clicking on the box to the left) for a **Tukey** (not Tukey-b). Then click on the **continue** button.

Next, click on the **options** button. This will allow you to choose to display the descriptive statistics for these samples. Please click on that choice and click on **continue** to return to the ANOVA dialogue box. Click on **OK** to begin the analysis.

Lab Due: Wed. Nov. 18th