

Statistics 528: Homework 3

Due Friday, January 30

1. IPS Section 2.1, exercises 2.1, 2.4, 2.8, 2.12

Making a scatterplot in MINITAB:

Select **Graph-Plot** and then choose the variable for the X (horizontal) axis and the Y (vertical) axis. For exercise 2.12, you need to use different symbols for the two the runs of the experiment. You can do this by clicking on the downward arrow beside **For each** in the dialogue box and changing **Graph** to **Group**. Then select the variable C1 in the **Group Variables** box.

2. IPS Section 2.2, exercises 2.20 (b-d), 2.21, 2.34

Note on exercise 2.20: We did problem 2.11 in class, so you do not need to make the scatterplot of the data. Be sure to take a look at the lecture notes so you can check that your answers for 2.20 b-d make sense.

Calculating correlations in MINITAB:

To calculate the correlation between two variables in MINITAB select **Stat-Basic Statistics-Correlation** and then enter the two variables in the **Variables** box. To compute correlations for subsets of the data, you first need to separate your data. This is done by selecting **Manip-Split Worksheet** and then selecting the variable you want to use to split your data in the **by variables** box. MINITAB will generate two worksheets, and you then can compute the correlation for the variables in each worksheet separately.