QMTH 206
Computer Exercise Number 2

Refer to the data set on SAT vs. GPR. Using Excel:

1. Graph the data. Use SAT as the independent variable.

2. Arrive at the least-squares equation relating GPR to SAT score. Use SAT as the independent variable. Make sure you write out the complete regression equation. Also write out r and r².

3. Perform a t-test on the population slope using an α of 5%.

4. Construct a 95% prediction interval using average SAT (rounded to the nearest 10 points) as the value of x.

5. Interpret, as best you can, all the information you have. Here’s the question you want to answer: Using the above results, is SAT a good way of predicting success or failure in college?

Assignments should be done neatly, with the following specific instructions:

1. Print the chart in landscape mode and size it to fit the entire page.

2. Arrange everything in order.

3. Put your name at the top right-hand side of the first page.

4. Staple the completed assignment. Do not fold.

5. The project must be in hardcopy form. No e-mails except in unusual circumstances!

For this assignment, the first page will consist of the written-out regression equation, the t-test and the prediction interval. You do not have to type the written section, but it has to be legible. The graph will be the second page, followed by the output. Your work will be graded on correctness and appearance. You may receive help from other people, but your work must be your own.

If you elect to do this as a group project, the grading will be as follows: The total score, after deductions, will be divided by the number of members in the group. This number, rounded downward, will then be assigned to each member of the group. This grading applies to all projects in this class done under the group project option.