

The data available at <http://jan.ucc.nau.edu/~ns46/114/classdata> contains the test and homework scores of an actual MAT114 class. Load this data into an Excel sheet to answer the following questions. Turn in this paper together with a hardcopy of your Excel sheet.

1. Total scores were calculated using the weights:

Final 25%, Tests 55%, Homework 20%.

Create a **Total** column in your spreadsheet. What is the total score of the student whose test3 score is 100?

2. Calculate the mean, median, standard deviation and quartiles of each test and homework scores in your spreadsheet. What is the standard deviation of test3?

3. What is the correlation between the following?

a. homework and the total score

b. test3 and the total score

4. Create a scatter plot of test2 against the total score in your spreadsheet. What is the equation of the regression line?

5. Suppose a student's score on test2 was 80. What is your prediction on his total score?

6. Use bins with size 5 to create frequency data for each test, homework and the total score. Make a histogram showing the frequencies of the three tests and the final. Make another histogram showing the frequencies of the total score.