Review for Final Exam

Math 1530

1. Construct frequency distributions (tables) & histograms. (Ch. 2 Review Exercises page 74 #’s 1, 2)

2. Find the mean, median, mode, range, standard deviation, and variance for a given sample of data. (Ch. 3 Review Exercises page 127 # 1, 2, 8)

3. Find basic probabilities. Use the Multiplication and Addition Rules as well as complements to find probabilities. (Ch. 4 Review Exercises page 186 #’s 1-10, 12)

4. Find binomial probabilities using your calculator or Table A-1. (Section 5-3 page 219 #’s 29-37)

5. Find probabilities involving Normal Distributions. Find values (percentiles) given probabilities (or area under the curve). Implement the Central Limit Theorem. Know how to use Table A-2. (Ch. 6 Review Exercises page 309 #’s 1, 2, 3, 6, 7)

6. Find and interpret Confidence intervals for population proportions & population means. Be able to find margin of error. Know when to use t and z distributions for critical values. Be able to determine the minimum sample size needed for a given margin of error. (Ch. 7 Review Exercises page 367 #’s 1, 2, 5a, 6-9)

7. Perform Hypothesis Tests for population proportions & means. Be able to determine type of test (left, right, or two-tail), test statistic, critical value(s), decision test, conclusion about null hypothesis, & final wording about claim. Find and interpret p-values. (Ch. 8 Chapter Quick Quiz page 426 #’s 1, 3, 5 and Review Exercises page 427 #’s 2, 3, 4, 6, 7, 10)

8. Correlation & Regression. Find the linear correlation coefficient, test for linear correlation, find the regression equation and predict values of dependent variable. (Ch. 10 Review Exercises page 527 #’s 1-3)