MATH 155 Exam II Review (Section 3.1 - 5.3)

1. Know the definition of and how to find the mean, median, mode, range, variance and standard deviation. (3.1 - 3.2)

2. Know how to use the Empirical Rule and Chebyshev's Inequality to describe a data set.  $\left( 3.2\right)$ 

3. Know how to find the z-score, percentile, quartile corresponding to a given data value and vice versa. (3.3)

4. Know how to determine interquartile range (IQR) and know how construct a boxplot & a modified boxplot and determine possible outliers. (3.3)

5. Know how to construct a scatterplot for bivariate data. (4.1)

6. Know how to compute and interpret the correlation coefficient. (4.1)

7. Know how to compute the least-squares regression line and the definition of outcome variable and explanatory variable. (4.2)

8. Know the definition of probability experiment, law of large numbers, probability, sample space, event. (5.1)

9. Know how to determine the probability of an event for equally like outcomes and using the empirical method. (5.1)

10. Know the rule of complements. (5.2)

11. Know the additive rule of probability and how to determine if two events are mutually exclusive. (5.2)

12. Know the multiplicative rule and how to determine if two events are independent.  $\left( 5.3\right)$ 

Review Exercises. Homework, Quizzes, Ch. 3 Review Exercises: #1 - 15 ; Ch. 4 Review Exercises: #1 - 11; Ch. 5 Review Exercises: #1 - 11