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| **CHAPTER 3, *Exploring Quantitative Data***  **OBJECTIVES (Pages 44 to 77)**   * Create/interpret a histogram. * Create/interpret a stem-and-leaf display. * Interpret a dotplot. * Describe a histogram by giving its shape, center, and spread. * Identify the shape of a histogram in one of several ways:   unimodal, bimodal, uniform, symmetric, left-skewed, right skewed.   * Identify the center of a distribution by stating the median, mean, and mode. * Find the first and third quartiles. * Find the interquartile range. * Report the Five-Number Summary: minimum, 1st quartile, median, 3rd quartile, maximum. * Know that the 2nd quartile is usually known as the median. * Identify the spread of a sample distribution by computing the range, interquartile range, sample variance, and sample standard deviation. * Create/interpret a boxplot. * Know how to find the outliers of a distribution by using both Tukey’s Rule and by using your TI-84 calculator.   **Technology:** TI-84 plus graphing calculator  ***MONDAY (9.23.24*)**  **Discuss the previously assigned work:**   * Grades on a statistics test given at High University are as follows:   12, 90, 85, 78, 65, 88, 90, 0, 100, 99, 72, 95, 83, 76, 79, 100  Find the following:   1. Mean = x̅ 2. Median = Med 3. Mode 4. Minimum = Min 5. 1st Quartile = Q1 6. Median = Q2 7. 3rd Quartile = Q3 8. Maximum = Max 9. Interquartile Range = IQR 10. Five Number Summary 11. What is John W. Tukey’s Test for calculating outliers? 12. The outliers if any 13. The boxplot with whiskers and outliers 14. n = 15. range =   **Notes:**  Sample variance and sample standard deviation are measures of spread of a distribution.  What is the symbol for sample variance?  What is the symbol for sample standard deviation?  Calculating sample standard deviation ...  **Learn how to compute sample variance and sample standard deviation “by hand” and by using your TI-84 graphing calculator. We will use the following data and round our final answers to the nearest tenth.** Check by using the *1-Variable Statistics* option on your TI-84 graphing calculator.   1. Heights in Inches for Members of Swim Team   60, 65, 52, 76, 68, 66   1. Heights in Inches for Members on a Basketball Team   76, 75, 67, 74, 73, 70   1. Grades for 5 Students on Final Math Exam   88, 88, 88, 88, 88  **Class Work/Homework:**   * Page 84 (#41, 43, 45). * Study for the **Quiz: Analyzing a Set of One-Variable Data** to be taken during your next class period.   ***WEDNESDAY (9.25.24*)**  **Discuss the previously assigned homework:** Page 84 (#41, 43, 45).  **Quiz: Analyzing a Set of One-Variable Data** (You may use your notes.)  **Class Work/Homework:**   * Read and take notes on pages 61 – 68. * Find the sample variance and sample standard deviation for the following data sets “by hand.” Round your final answers to the nearest tenth. Check by using the *1-Variable Statistics* option on your TI-84 graphing calculator.  1. **The weights in pounds for 6 puppies in the Lake City Humane Shelter are as follows: 5, 6, 10, 12, 15, 19.** 2. **The High Temperatures Recorded in Degrees Fahrenheit for August 1 – 6, 2022, in Valley City, are as follows: 78, 76, 88, 102, 93, 97.**   ***FRIDAY (9.27.24*) B-DAY, NO CLASS**  ***MONDAY (9.30.24*)**  **Discuss the previously assigned problems.**  **Class Work/Homework:**     * **Read and take notes on pages 69 – 75.** * Pages 81 – 83 (#30 – 35). |
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