Chapter 2

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| Day | Topics | Objectives: Students will be able to… | Homework |
| 1 | 2.1 Introduction, Measuring Position: Percentiles, Cumulative Relative Frequency Graphs, Measuring Position: z-scores | * Use percentiles to locate individual values within distributions of data. * Interpret a cumulative relative frequency graph. * Find the standardized value (*z-*score) of an observation. Interpret *z-*scores in context. | 5, 7, 9, 11, 13, 15 |
| 2 | 2.1 Transforming Data, Density Curves | * Describe the effect of adding, subtracting, multiplying by, or dividing by a constant on the shape, center, and spread of a distribution of data. * Approximately locate the median (equal-areas point) and the mean (balance point) on a density curve. | 19, 21, 23, 31, 33-38 |
| 3 | 2.2 Normal Distributions, The 68-95-99.7 Rule, The Standard Normal Distribution, *Technology: Standard Normal Curve Calculations with the Calculator and with an Applet* | * Use the 68–95–99.7 rule to estimate the percent of observations from a Normal distribution that fall in an interval involving points one, two, or three standard deviations on either side of the mean. * Use the standard Normal distribution to calculate the proportion of values in a specified interval. * Use the standard Normal distribution to determine a *z-*score from a percentile. | 41, 43, 45, 47, 49, 51 |
| 4 | 2.2 Normal Distribution Calculations, *Technology: Normal Curve Calculations with the Calculator and with an Applet* | * Use Table A to find the percentile of a value from any Normal distribution and the value that corresponds to a given percentile. | 53, 55, 57, 59 |
| 5 | 2.2 Assessing Normality, *Normal Probability Plots on the Calculator* | * Make an appropriate graph to determine if a distribution is bell-shaped. * Use the 68-95-99.7 rule to assess Normality of a data set. * Interpret a Normal probability plot | 63, 65, 66, 68, 69-74 |
| 6 | Chapter 2 Review |  | Chapter 2 Review Exercises |
| 7 | Chapter 2 Test |  | 39R, 40R, 75R, 76*R* |