**ANLY500 Homework 2**

4. A national homebuilder builds single-family homes and condominium-style townhouses. The Excel file *House Sales* provides information on the selling price, lot cost, type of home, and region of the country (Midwest, South) for closings during 1 month. Construct a scatter diagram showing the relationship between sales price and lot cost.

9. In the Excel file Banking Data, apply the following data visualization tools:

1. Use data bars to visualize the relative values of Median Home Value.
2. Use color scales to visualize the relative values of Median Household Wealth.
3. Use an icon set to show high, medium, and low bank balances, where high is above $30,000, low is below $10,000, and medium is anywhere in between.

23. Use the *Histogram* tool to construct a frequency distribution of lunch sales amounts in the *Restaurant Sales* database.

24. A community health-status survey obtained the following demographic information from the respondents:

|  |  |
| --- | --- |
| **Age** | **Frequency** |
| 18 to 29 | 297 |
| 30 to 45 | 743 |
| 46 to 64 | 602 |
| 65 + | 369 |

Compute the relative frequency and cumulative relative frequency of the age groups.

31. Find the 10th and 90th percentiles and 1st, 2nd, and 3rd quartiles for the combined amounts of checking and savings accounts in the Excel file *Credit Risk Data*.

39. The Excel File Rin’s Gym provides sample data on member body characteristics and gym activity. Create PivotTables to find:

1. a cross-tabulation of gender and body type versus BMI classification
2. average running times, run distance, weight lifting days, lifting session times, and time spent in the gym by gender.

Summarize your conclusions.

41. A marketing researcher surveyed 92 individuals, asking them if they liked a new product concept or not. The results are shown below:

|  |  |  |
| --- | --- | --- |
|  | **Yes** | **No** |
| Male | 30 | 50 |
| Female | 6 | 6 |

Convert the data into percentages. Then construct a chart of the counts and a chart of the percentages. Discuss what each conveys visually and how the different charts may lead to different interpretations of the data.