**ANSWERS TO DATABASE EXERCISES**

**Chapter 1**

**Introduction to Statistics**

1.

1. Categorical
2. Quantitative
3. Quantitative

**Chapter 2**

**Organizing and Visualizing Data**

1. Using the RRSP database, construct a histogram for the variable Average Age of RRSP Contributors. How is the histogram shaped? Is it high in the middle or high near one or both ends of the data? Is it relatively constant in size across the class (uniform), or does it appear to have no shape? Does it appear to be nearly “normally” distributed?

The graph appears to be nearly “normally” distributed with most of the data centered around 43 to 46 years of age.

2.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Frequency Distribution - Quantitative | | | | | |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  | ***Energy Index*** |  |  |  |  |  | *cumulative* | |
|  | *lower* |  | *upper* | *midpoint* | *width* | *frequency* | *percent* | *frequency* | *percent* |
|  | 175.0 | < | 210.0 | 192.5 | 35.0 | 11 | 4.3 | 11 | 4.3 |
|  | 210.0 | < | 245.0 | 227.5 | 35.0 | 41 | 16.0 | 52 | 20.2 |
|  | 245.0 | < | 280.0 | 262.5 | 35.0 | 107 | 41.6 | 159 | 61.9 |
|  | 280.0 | < | 315.0 | 297.5 | 35.0 | 64 | 24.9 | 223 | 86.8 |
|  | 315.0 | < | 350.0 | 332.5 | 35.0 | 20 | 7.8 | 243 | 94.6 |
|  | 350.0 | < | 385.0 | 367.5 | 35.0 | 12 | 4.7 | 255 | 99.2 |
|  | 385.0 | < | 420.0 | 402.5 | 35.0 | 2 | 0.8 | 257 | 100.0 |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 257 | 100.0 |  |  |

Most of the data center in the middle class and the left endpoint of the histogram. It appears the histogram is not uniform or symmetrical.

3.

It looks like the unemployment rate is bimodal, with numbers mostly in the 5–6% range or 8–9% range.