

## Chapter 3 Homework

1. Consider again the high temperatures in 36 US cities on July 20, 2012 (source: <http://www.nws.noaa.gov/xml/tpex/scs.php>). The data has been ordered for you.

| <b>CITY</b>   | <b>HI</b> |
|---------------|-----------|
| ANCHORAGE     | 60        |
| CHEYENNE      | 68        |
| BISMARCK      | 72        |
| CASPER        | 72        |
| BILLINGS      | 73        |
| COLORADO SPGS | 77        |
| BOISE         | 82        |
| BUFFALO       | 85        |
| CARIBOU       | 85        |
| ASHEVILLE     | 86        |
| CHARLESTON SC | 86        |
| BIRMINGHAM    | 87        |
| BROWNSVILLE   | 87        |
| ATLANTA       | 88        |
| BATON ROUGE   | 89        |
| COLUMBUS GA   | 89        |
| AUSTIN        | 90        |
| CINCINNATI    | 90        |
| CHATTANOOGA   | 91        |
| CLEVELAND     | 91        |
| COLUMBIA SC   | 91        |
| AKRON CANTON  | 92        |
| AMARILLO      | 92        |
| BRIDGEPORT    | 92        |
| ABILENE TX    | 93        |
| CHARLOTTE     | 93        |
| COLUMBUS OH   | 93        |
| ALBANY NY     | 94        |
| CHARLESTON WV | 94        |
| ALLENTOWN     | 95        |
| ATLANTIC CITY | 95        |
| BURLINGTON VT | 95        |
| CHICAGO       | 95        |
| BOSTON        | 97        |
| BALTIMORE     | 98        |
| ALBUQUERQUE   | 100       |

MTH 243 Introduction to Probability and Statistics

- a. Make a frequency distribution table and relative frequency distribution table which divides the data into **equal size** intervals. Use at least 4 intervals.
- b. Make the corresponding frequency histogram – be sure to label accurately.
- c. Make the corresponding relative frequency histogram – be sure to label accurately and that the heights are correctly proportioned. Don't be sloppy – points (points off ) for neatness and accuracy (lack of).
- d. Make a stem and leaf graph of the data. **CIRCLE THE MEDIAN.**