

## HW 2.2 Guide

1-5: These problems deal with the definitions of this section.

6-7: These exercises ask you to interpret histograms, answering questions about them.

8: This problem focuses on shapes of distributions. Keep in mind that a set of data is considered left-skewed if the bulk of the values can be found to the right with the unusual values to the left, and it is right-skewed if the bulk of the values can be found to the left with the unusual values to the right.

9: In part A you can construct the relative frequency distribution using StatCrunch by copying the data into StatCrunch and then using Graph > Bar Plot > With Summary. Select relative frequencies under type and check the box for display value above bar. The Categories are in column 1, and the Counts are in column 2.

In parts B & C, remember that you have to move the decimal point 2 places to the right when converting a decimal to a percent.

10: Just like in the interactive assignment, work your way backwards from a stem-and-leaf display to the original data set. Don't forget to put a comma between the values.

11: You are given a frequency distribution, and are asked questions about the number of classes, the class limits, and the class width.

12: In part A you can construct the relative frequency distribution using StatCrunch by copying the data into StatCrunch and then using Graph > Bar Plot > With Summary. Select relative frequencies under type and check the box for display value above bar. The Categories are in column 1, and the Counts are in column 2. You will need to maximize the graph (or make it full screen) to see the relative frequencies. The graph for part B can be created by changing "Relative Frequency" for the graph back to "Frequency".

The graph for part C can be recreated by changing back to "Relative Frequency".

To finish part C, use the relative frequency distribution from part A. Remember that you have to move the decimal point 2 places to the right when converting a decimal to a percent.

13: Similar to problem 12.

14: Open the data set in StatCrunch. When we have the data set, rather than the summary/frequency distribution, use Graph > Histogram to create the graph.

Part A: Set the starting value to 0.5 (since 1 is the lowest value) and the width to 1 (since the data are discrete). Select frequency, and place the value over the bars.

Part B: Edit the previous graph, changing to relative frequency.

Parts C & D come from the relative frequencies in Part B. Don't forget to move the decimal point.

The graphs for Parts E & F can be found by repeating the process from Parts A & B.

Part G: Determine the shape from the graph.

15: Same idea as problem 14, but the first lower class limit and width are provided in the problem. (The data are continuous this time, not discrete.)

16: Create a stem-and-leaf plot using StatCrunch.