

Getting Ready for the Midterm – Chapter 2

Topics

You are responsible for the following:

- Given a frequency distribution, create a relative frequency distribution.
- Create a bar graph for qualitative data.
You need to be able to either do this by hand, or know how to do it on StatCrunch and copy it to your paper.
- Create a pie chart for qualitative data.
You need to be able to do this on StatCrunch “with summary” or “with data”, or you can do it by hand.
- Create a frequency distribution and a histogram.
You need to be able to do this by hand, or know how to do it on StatCrunch and copy it to your paper.
- Create a stem-and-leaf display.
Again, by StatCrunch or by hand.
You may be given a stem-and-leaf and asked to use it to recreate a data set.
- Identify the shape of a distribution: left-skewed, right-skewed, bell-shaped symmetric, uniform.

Practice Problems

1) The following frequency distribution shows the number of rounds played by 200 professional golfers.

Number of Rounds	Relative Frequency
45 to 54	3
55 to 64	9
65 to 74	21
75 to 84	47
85 to 94	64
95 to 104	34
105 to 114	16
115 to 124	6

2) A survey of 150 fourth- and fifth-graders about their favorite breakfast food produced the following results: Cereal (63), Eggs (33), Pancakes (21), Toast (12), Doughnuts (9), Toaster Pastries (12), Other (3). Construct a bar graph for the data.

3) A poll of 500 potential Democratic primary voters in New Hampshire revealed that 227 preferred candidate A, 212 preferred candidate B, and 61 were undecided. Construct a pie chart showing the percentages for each candidate, as well as undecided.

4) Here are the ages of the Presidents of the United States at inauguration (from George Washington through Barack Obama). Construct a frequency distribution and a histogram for these ages.

Let the first class begin at 40, and use a class width (or binwidth) of 5.

57 61 57 57 58 57 61 54 68 51 49 64 50 48 65
52 56 46 54 49 51 47 55 55 54 42 51 56 55 51
54 51 60 62 43 55 56 61 52 69 64 46 54 47

5) Create a stem-and-leaf display for the number of first downs gained by the 32 NFL teams in the last two weeks of the season.

36 35 28 42 47 28 46 38
30 22 22 23 32 31 53 29
42 38 14 44 43 45 34 36
42 30 42 52 14 35 46 51

6) Based on the results of problems 4 and 5, describe the shape of those two distributions.