Getting Ready for the Midterm – Chapter 2

Topics

You are responsible for the following:

- Given a frequency distribution, create a relative frequency distribution or a histogram.
- Given a histogram, determine the frequency distribution associated with it.
- 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.
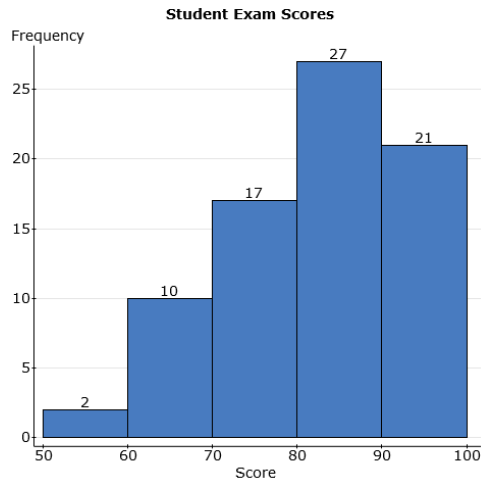
Practice Problems

Frequency Distribution to Relative Frequency Distribution or Histogram

1) The following frequency distribution shows the number of rounds played by 200 professional golfers. Construct a histogram and a relative frequency distribution.

Number of Rounds	Frequency
45 to 55	3
55 to 65	9
65 to 75	21
75 to 85	47
85 to 95	64
95 to 105	34
105 to 115	16
115 to 125	6

Histogram to Frequency Distribution

2) Use the given histogram of student scores to create a frequency distribution.

Bar Graph

3) 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.

Pie Chart

4) 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.

Frequency Distribution and Histogram

5) Here are the ages of the Presidents of the United States at inauguration (from George Washington through Donald Trump). 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 | 70 |