

Terms:

Frequency: the number of times a value occurs (count them)

Relative Frequency: the percent that the value occurs relative to the others (frequency divided by total)

Graphs for Categorical Data

Graph Name	Example	Purpose / Features
Bar Graph	What is your favorite subject?	<p>Shows a picture of the frequency of each category.</p> <p>The area is proportional to the frequency – so a category with twice the frequency will have twice the area for its bar.</p> <p>Categories are shown on the x or y axis with the scale starts at zero. Place gaps between the categories.</p>
Line Graph	What was the temp. over the last week?	<p>Shows a picture of the change in one category over time.</p> <p>A second category may be shown to compare the change over time for the variables.</p> <p>Show the categories in a key that clearly describes the label for each category.</p> <p>Show time is on the x axis continuously.</p>
Histogram	How many letters in your last name?	<p>Shows a picture of the frequency of one category over a continuously labeled axis.</p> <p>The area is proportional to the frequency– so a category with twice the frequency will have twice the area for its bar.</p> <p>Same set up as a bar graph but do not place gaps between the categories.</p>

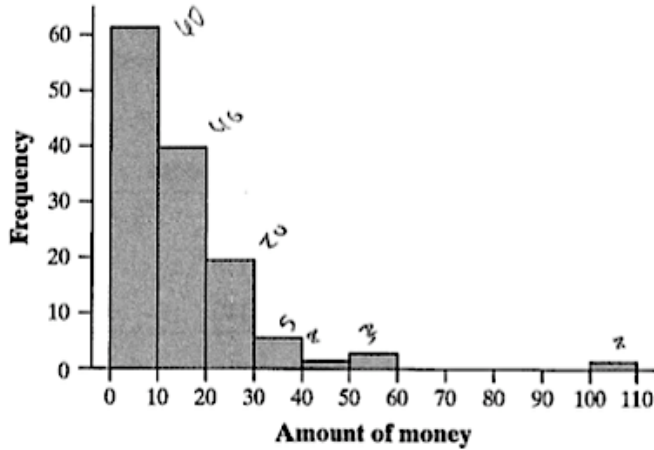
HW 1: IXL N1 and N2 plus the problems below:

1 – create a frequency plot from the table below:

Value	Frequency
1	1
2	3
3	4
4	4
5	1
6	2
7	3
8	2

1																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				

Questions T1.5 and T1.6 refer to the following setting. In a statistics class with 136 students, the professor records how much money (in dollars) each student has in his or her possession during the first class of the semester. The histogram shows the data that were collected.



T1.5. The percentage of students with less than \$10 in their possession is closest to
 (a) 30%. (b) 35%. (c) 50%. (d) 60%. (e) 70%.