Hung Up on Histograms? Hang On to Explore the Hilly Terrain of Histograms!

- 1. What are the features of a histogram?
- 2. Histograms may represent numerical data where the answer to the question is a number. Sometimes the answer is an Integer that counts how many of something (e.g., How many calculators do you own?) and sometimes the answer is a Real Number as a continuous measure of something that may include fractional or decimal values as well as Integer values (e.g., How many centimeters tall are you?).

List two questions that you will use to collect data that would be appropriate to represent with a histogram. Be sure you have one question to collect a set of data that includes only Integers, and one question to collect a set of data that is not restricted to Integer values.

Question 1 (Integer Data):		
Question 2 (Continuous Data):		

3. Histograms show the frequency of data values, or how many times each data value occurs. Histograms are helpful for organizing large sets of data. Be sure to collect a set of data with at least 20 data values. You may use the charts below (or make your own) to record the data collected for each question.

Question 1 (Integer Data)	
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Question 2 (Continuous Data)	

4.	The histogram plot on the TI-73 Ex determine the size of the intervals determine what information will hel example, consider what size interv	and to view the data. Bap you to set a reasonab	ased on the data you collected, le WINDOW to view the data. For
	Minimum data value Maximum data value Interval Size Lowest Frequency Highest Frequency	Question 1 (Integer Data)	Question 2 (Continuous Data)
5.		up at any one time, so urite the information below data are represented in the sen showing the histographs.	se a TI-Graph Link cable and TI- w, from the screens with the
			WINDOW:
			Xmin = Xmax =
			Xscl = Ymin = Ymax = Yscl =
	Question		
			WINDOW:
			Xmin = Xmax =
			Xscl = Ymin = Ymax = Yscl =

6.	Write at least two statements that make sense to conclude about the data represented in histogram above.		
7.	Choose one of your questions and histograms above the shape of the histogram. Print, or record below, to shape of the histogram.		
	Question		
		WINDOW:	
		Xmin = Xmax =	
		Xscl = Ymin = Ymax = Yscl =	
	Question		
		WINDOW:	
		Xmin = Xmax =	
		Xscl = Ymin = Ymax = Yscl =	

	Question 1 (Integer Data):		
	mean		How does this describe the data?
	median		How does this describe the data?
	mode		How does this describe the data?
	range		How does this describe the data?
	Question 2 (Continu	ious Data):	
	mean		How does this describe the data?
	median		How does this describe the data?
	mode		How does this describe the data?
	range		How does this describe the data?
9.			es) that explains your current thinking about appropriate ways ns. Include something about what you know, and what is still

confusing, or questions you still have about histograms.

8. Find the mean, median, mode and range for each set of data you collected, and explain how

each describes the data.