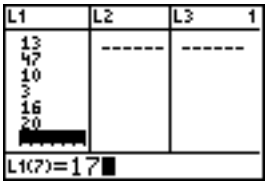
Constructing a Frequency Table and Histogram

Given the following data set, construct a frequency table. We will use the 'Histogram' graphing function on your TI 83/84 calculator.

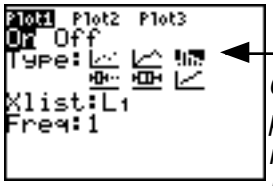
13	47	10	3	16	20	17	4	2
7	25	8	21	19	15	3	14	6
12	45	1	8	4	14	11	23	12
6	2	14	13	7	15	46	9	18
34	13	41	28	36	17	24	29	9
14	26	10	24	37	31	16	12	16

Begin entering this data into L1



[2nd] STAT PLOT *choose Plot 1:*

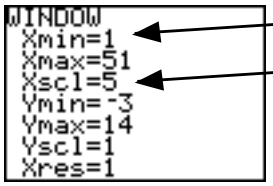
Pres[Enter] *to turn Plot 1 On*



Choose the 3rd plot on the top row for a histogram

We want 10 classes with a lowest limit of 1. Select 'Window' to set.

[WINDOW]



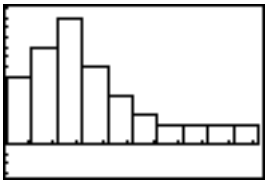
Set Xmin for the lowest class limit

Set Xscl (x scale) for the class width
RoundUp[(Max-Min)/NumClasses] = 5 in this case

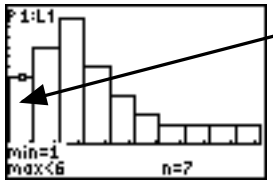
Note:
- Xmax must be large enough to accomodate the largest upper class limit.
- Set Ymin to a negative number as shown in window. This will allow for tracing.
- Set Ymax to the highest frequency for any class. This may require a couple of tries.

Now [GRAPH] and [TRACE] to construct your frequency table.

[GRAPH]

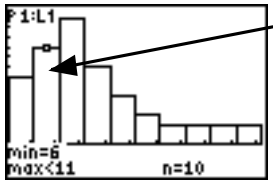


[TRACE]



This class has a lower limit = 1 and an upper limit = 5 with a frquency of n=7

scroll right



This class has a lower limit = 6 and an upper limit = 10 with a frquency of n=10

Continue scrolling to complete the Frequency Table. See next page -->

Lower Class Boundary	Lower Class Limit	Upper Class Limit	Upper Class Boundary	Class MidPoint	Frequency
0.5	1	5	5.5	3	7
5.5	6	10	10.5	8	10
10.5	11	15	15.5	13	13
15.5	16	20	20.5	18	8
20.5	21	25	25.5	23	5
25.5	26	30	30.5	28	3
30.5	31	35	35.5	33	2
35.5	36	40	40.5	38	2
40.5	41	45	45.5	43	2
45.5	46	50	50.5	48	2