

MAKING A HISTOGRAM USING A TI-83 OR TI-84.

We are going to use data from our notes to illustrate how we can make a histogram using our calculator.

DATA.

Consider the following data:

14 21 23 21 16 19 22 25 16 16
24 24 25 19 16 19 18 19 21 12
16 17 18 23 25 20 23 16 20 19
24 26 15 22 24 20 22 24 22 20.

Make a histogram for this data set. Use a class width of 3 units starting at 12.

ENTERING DATA.

Step 1. Press the key that reads: STAT.

```
2001 CALC TESTS
1:Edit
2:SortA(
3:SortD(
4:ClrList
5:SetUpEditor
```

Step 2. Press the key that reads: ENTER.

L1	L2	L3	1
████████	-----	-----	

L1() =

Step 3. Record your data on list 1 (L1).

L1	L2	L3	1
14	-----	-----	
24			
16			
24			
21			
24			
17			

L1() = 1 4

MAKING HISTOGRAM.

Step 4. Once you are done entering your data, press the key that reads 2ND and then the one that reads Y=

```
STAT PLOTS
1:Plot1...Off
  L1 L2
2:Plot2...Off
  L1 L2
3:Plot3...Off
  L1 L2
4↓PlotsOff
```

Step 5. Press ENTER.

```
Plot2 Plot3
On Off
Type: [ ] [ ] [ ]
      [ ] [ ] [ ]
Xlist:L1
Ylist:L2
Mark: [ ] + .
```

Step 6. Highlight On and press ENTER.

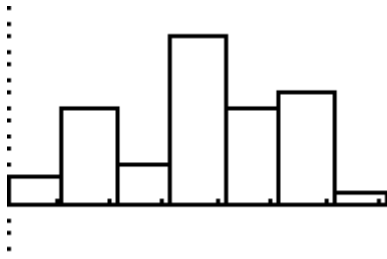
Step 7. Go down and choose the type of graph you want, a histogram. Highlight it and press ENTER.

```
Plot2 Plot3
On Off
Type: [ ] [ ] [ ]
      [ ] [ ] [ ]
Xlist:L1
Freq:10
```

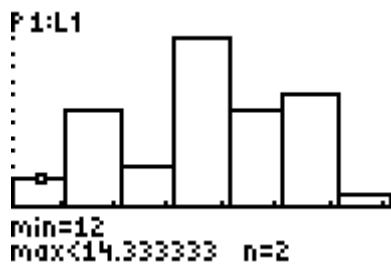
Step 8. Press ZOOM.

```
ZOOM MEMORY
1:ZBox
2:Zoom In
3:Zoom Out
4:ZDecimal
5:ZSquare
6:ZStandard
7↓ZTrig
```

Step 9. Either go to 9 (ZoomStat) and press ENTER or just press 9.



Step 10. Press the key that reads TRACE (you should see something like this...).



MODIFYING CLASS WIDTH.

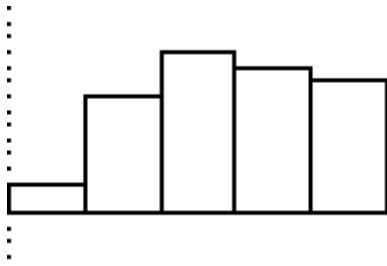
Step 11. Press the key that reads WINDOW.

```
WINDOW
Xmin=12
Xmax=28.333333...
Xscl=2.3333333...
Ymin=-3.60828
Ymax=14.04
Yscl=1
Xres=1
```

Step 12. Replace the above “parameters” (Xmax, Xscl, etc.) with

```
WINDOW
Xmin=12
Xmax=27
Xscl=3
Ymin=-3
Ymax=14
Yscl=1
Xres=1
```

Step 13. Press the key that reads: GRAPH (now you should see something like this...)



WE ARE DONE!!

NOTE. If you press the key that reads: TRACE, you will see that the class width is now 3 units. You will also see the number of observations in each class.

