

Graphing Most Beautiful Rectangle Survey

Each student has polled 25 people to determine which rectangle was the most beautiful. They recorded the responses in a table provided on the activity sheet. They graphed the results of their individual survey as a bar graph.

Have students combine their survey results into a class table that will show the frequency, and the frequency as a fraction, decimal, and percent.
Hint: You can use [b/c] to enter fractions (numerator [b/c]denominator) and [F↔D] to convert them to decimals.

Example of table

Rectangle	Frequency	Fraction	Decimal	Percent
A	11	11/150	0.07	7%
B	9	9/150	0.06	6%
C	10	10/150	0.07	7%
D	110	110/150	0.73	73%
E	10	10/150	0.07	7%

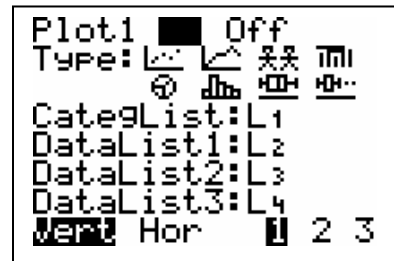
Now enter the survey information into the TI-73.

- Enter the rectangle letter in L1.
[LIST] to L1
[2nd][TEXT] arrow to " [ENTER]
Arrow to **A** [ENTER]
Arrow to **Done** [ENTER]
(Because " is only needed for the first element of a categorical list, you can enter the rest of the list without ".)
- Now enter the frequency.
[LIST] arrow to L2 and enter the frequency
- Now enter the percent.
[LIST] arrow to L3 and enter the percent
- Go to the Home screen.
[2nd] [QUIT]

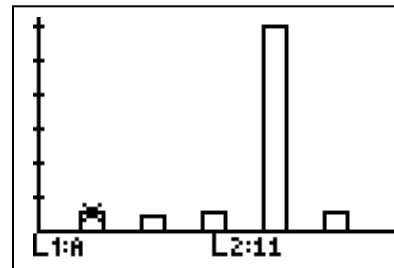
L1	c	L2	L3	3
A		11	7	
B		9	6	
C		10	7	
D		110	73	
E		10	7	
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To make a bar graph on the TI-73 showing the frequency results of the polls.

- a. Access the STAT PLOTS menu.
[2nd] [PLOT] (Above the y= key)
- b. Make sure the other plots are off.
4[ENTER]
- c. Select Plot 1
[2nd] [PLOT] [ENTER]
- d. Select the bar graph (first row, last from left) and continue setting up the plot as in the picture at the right. (DataList2 and DataList3 allow you to do a double or triple bar graph. They are not relevant to this activity, and whatever is listed is okay.)



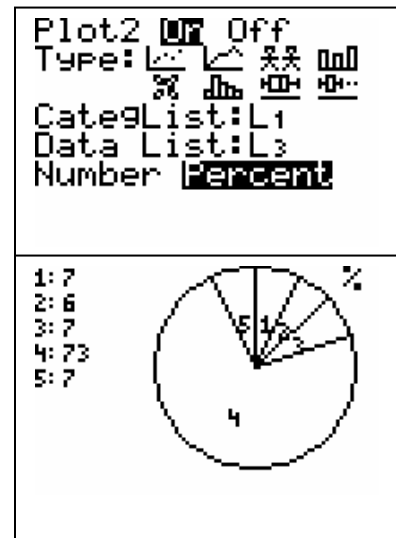
- e. Display the graph.
[ZOOM] 7
- f. Now move around the graph and See the data.
[TRACE] arrow to view data



Students can sketch their graphs on paper for their report.

To make a circle graph on the TI-73 showing the percents from the polls.

- a. Access the STAT PLOTS menu.
[2nd] [PLOT]
- b. Make sure the other plots are off.
4[ENTER]
- c. Select Plot 2.
[2nd] [PLOT] [2] [ENTER]
- d. Select the circle graph (second row, first from left) and continue setting up the plot as in the picture at the right.
- e. Display the circle graph.
[GRAPH]
- f. Move around the graph and see the data
[TRACE] arrow to view data



Students can sketch their graphs on paper for their report.