

**AN ANALYSIS OF STUDENTS
WITH MORE THAN 10 PENS IN
THEIR BACKPACK**

"C" LEVEL WORK

*annotated
w/
comments*

EXAMPLE

SUMMARY TABLE

• where is tie in to your demographic of students w/ 10+ pens in bag? Is that stating obvious in table

• There are 23 females and 7 males.

• The book categories with the largest number of students were non-fiction, mystery and history fiction.

• explain differences btwn genders: No boys like hist fict but 2nd most popular in girls. about 1/2 boys like non-fiction - but 3rd place for girls

		Sex		Row Summary
		f	m	
book	action	0	1	1
	comedy	2	0	2
	fantasy	2	2	4
	hist fiction	5	0	5
	mystery	6	1	7
	non-fiction	3	3	6
	romance	3	0	3
	sci-fi	2	0	2
Column Summary		23	7	30

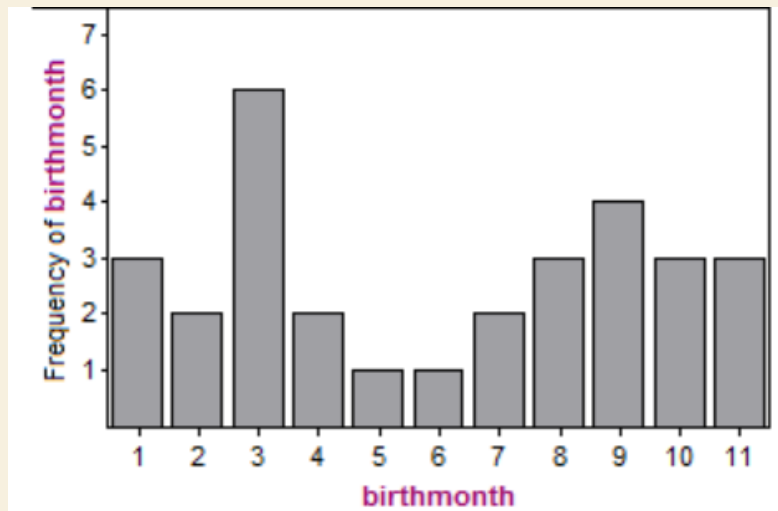
S1 = count ()

why girls outnumber boys 3 to 1?

BAR CHART

maybe a different categorical variable would have been better and tie back to you demographic

Birth Month of Students with More than 10 Pens



- March was the most frequent birth month of students with a large number of pens.
- May and June were the least frequent birth months.

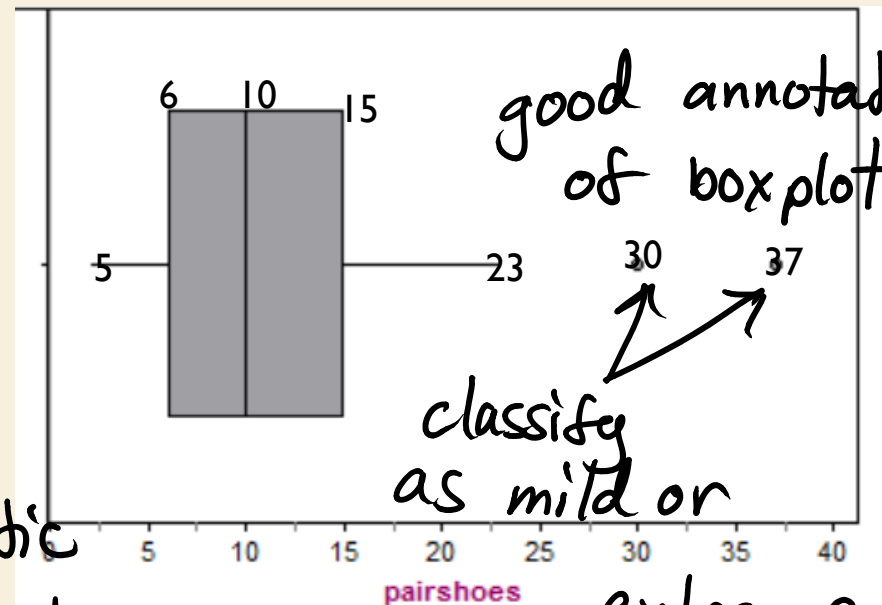
• why the dip in spring/summer?
did the entire population have fewer spring/summer babies?

BOX PLOT

- $IQR = Q3 - Q1 = 15 - 6 = 9$
- Mild Outliers: *Formula error*
- $Q1 - IQR = 6 - (9) = -3$
- $Q3 + IQR = 15 + (9) = 24$
- Extreme Outliers:
- $Q3 + 3IQR = 15 + 3(9) = 42$

• discuss shape/center while being mindful of which statistic to use for skewed vs symmetric

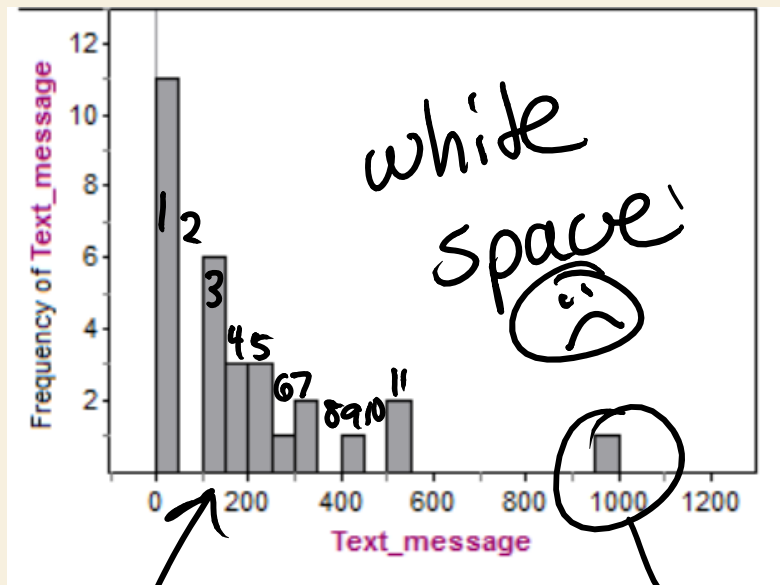
Number of Pairs of Shoes Owned



HISTOGRAM

#bars = $\sqrt{\# \text{ data points}}$
you had 30 students $\Rightarrow \sqrt{30}$ bars

Number of Text Messages on Your Phone



- The distribution is skewed to the right due to a few students having well over 200 text messages. The mean was 176 text messages and the standard deviation was 206.6.

which term summarize skewed distributions

over 11 bars.... I stopped counting

mention intext and rescale x-axis