Alg 1 0.13

Represent sets of data using different visual displays

frequency table
bar graph
- horizontal
- vertical

~~cumulative frequency~~
histogram – numerical
line graph + trends
stem-and-leaf plot
circle graph (pie chart) ??
box-and-whisker plot (boxplot)

min 1941 *

Q_1 1970

med 1994

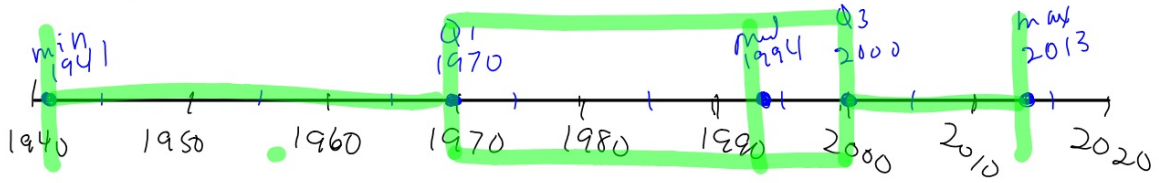
Q_3 2000

max 2013

Outlier?

IQR 30

1.5(30) = 45



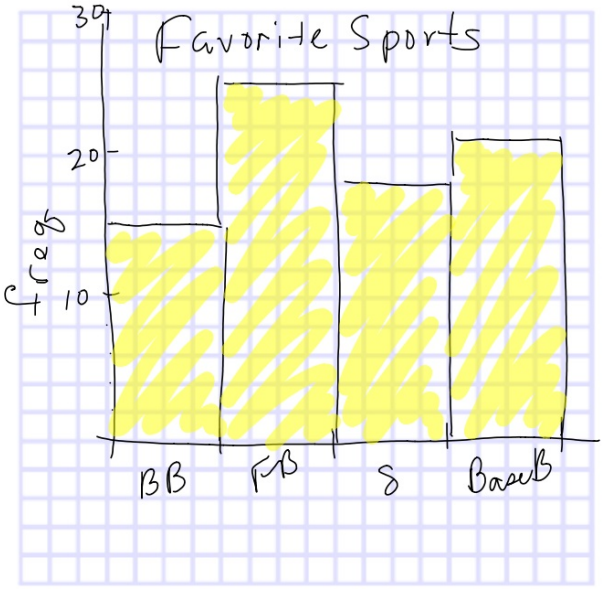
1925

2045

Example 1 Make a Bar Graph

Make a bar graph to display the data.

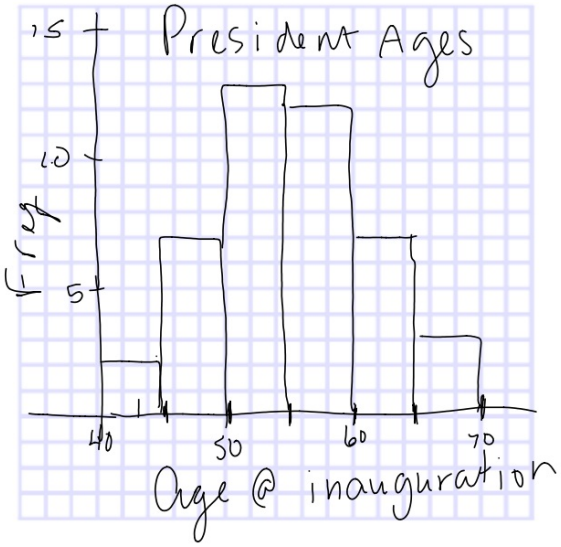
Sport	Tally	Frequency
basketball	𝍸 𝍸 𝍸	15
football	𝍸 𝍸 𝍸 𝍸 𝍸	25
soccer	𝍸 𝍸 𝍸 III	18
baseball	𝍸 𝍸 𝍸 𝍸 I	21



Example 2 Make a Histogram and a ~~Cumulative Frequency Histogram~~

Make histograms of the frequency

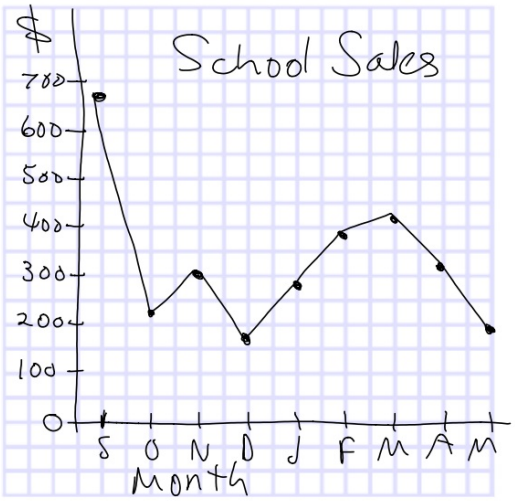
Age at Inauguration	40–44	45–49	50–54	55–59	60–64	65–69
U.S. Presidents	2	7	13	12	7	3



Example 3 Make a Line Graph

Sales at the Marshall High School Store are shown in the table. Make a line graph of the data. Trends

School Store Sales Amounts					
September	$670	December	$168	March	$412
October	$229	January	$290	April	$309
November	$300	February	$388	May	$198



Real-World Example 4 Make a Stem-and-Leaf Plot

ANIMALS The speeds (mph) of 20 of the fastest land animals are listed at the right. Use the data to make a stem-and-leaf plot.

42	40	40	35	50
32	50	36	50	40
45	70	43	45	32
40	35	61	48	35

Source: *The World Almanac*

Land Speed

Stem	Leaf
3	5 2 6 5 2 5
4	2 0 0 0 5 3 5 8 0
5	0 0 0
6	1
7	0

3|5 = 35

Angle measuring activity

P- 45

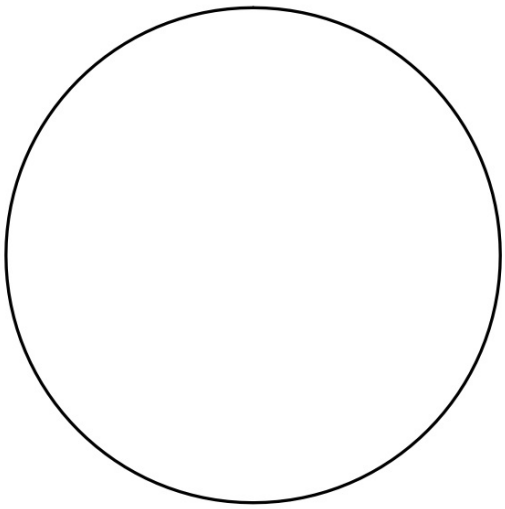
4- 9

Number of degrees in a circle?

Example 5 Make a Circle Graph

The table shows how Lily spent 8 hours of one day at summer camp. Make a circle graph of the data.

Summer Camp	
Activity	**Hours**
canoeing	3
crafts	1
eating	2
hiking	2



Example 6 Make a Box-and-Whisker Plot

Draw a box-and-whisker plot for these data. Describe how the outlier affects the quartile points.

14, 30, 16, 20, 18, 16, 20, 18, 22, 13, 8

Boxplot