

Alg 1 0.13

Represent sets of data using different visual displays

frequency table

bar graph

horizontal

vertical

~~cumulative frequency~~

histogram

line graph

stem-and-leaf plot

circle graph (pie chart)

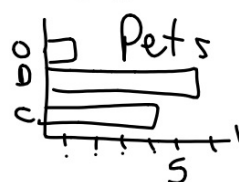
box-and-whisker plot (boxplot)

Activity: Favorite sport?

organize info

categories

numerical

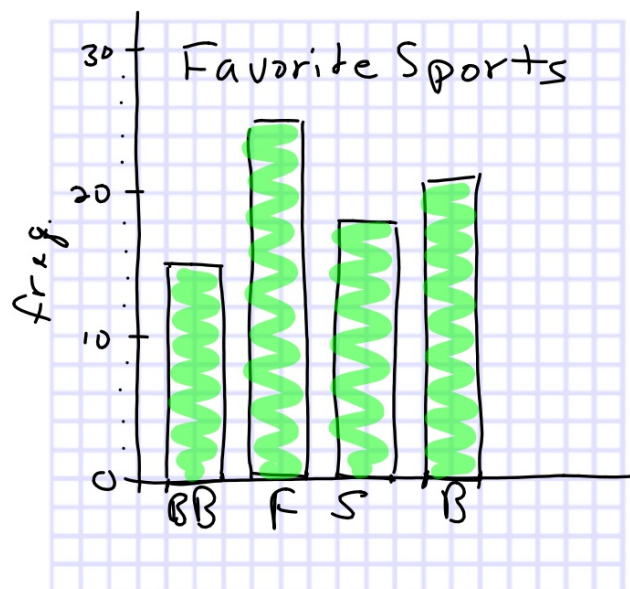


FB	5
BB	5
B/S	1
S	1
G	3
O	0

Example 1 Make a Bar Graph

Make a bar graph to display the data. ✓

Sport	Tally	Frequency
basketball		15
football		25
soccer		18
baseball		21



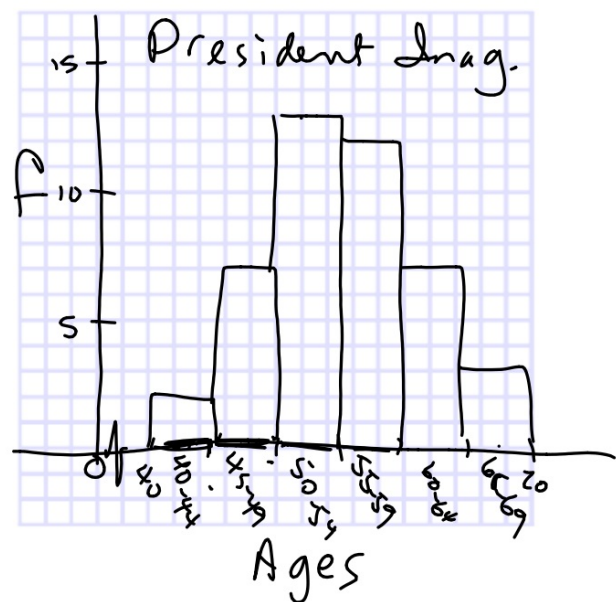
Example 2 Make a Histogram and a Cumulative Frequency Histogram

Make histograms of the frequency and the cumulative 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

Find the cumulative frequency for each interval

Age	< 45	< 50	< 55	< 60	< 65	< 70
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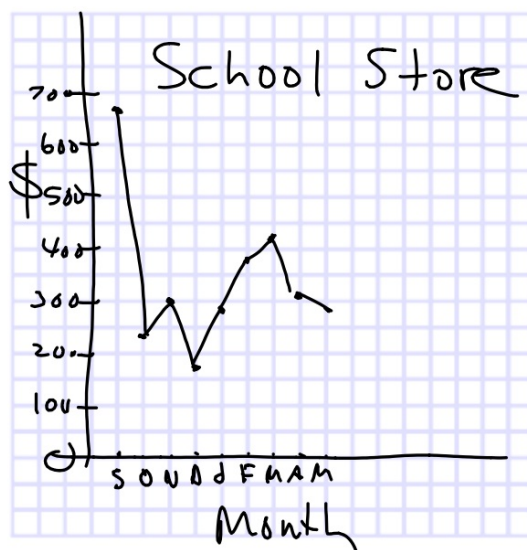
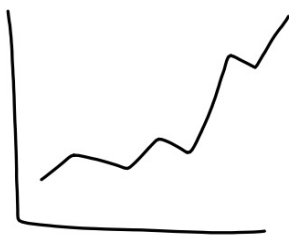
Example 3 Make a Line Graph

trend



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

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	46	40	35	50
32	50	36	50	40
45	70	43	48	32
40	35	61	49	35

Source: The World Almanac

Animal Speeds

Tens Ones

3	5, 2, 6, 2, 5, 5
4	2, 0, 0, 0, 5, 3, 5, 0, 8
5	0, 0, 0
6	1
7	0

$$\boxed{4 \overline{) 2} = 4 \text{ R } 2}$$

3	2 2 5 5 6
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Number of degrees in a circle?

360

P-45

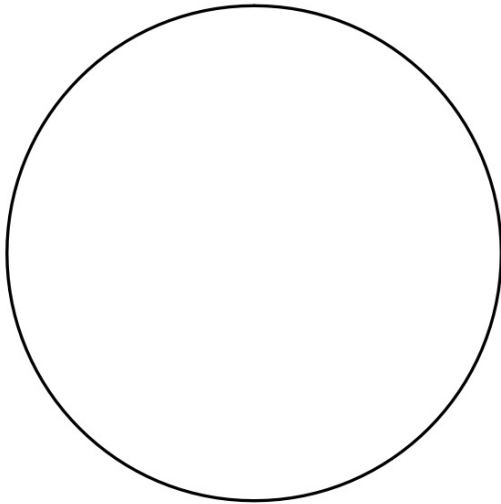
~~1-5,7~~

1-5,7

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