

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)

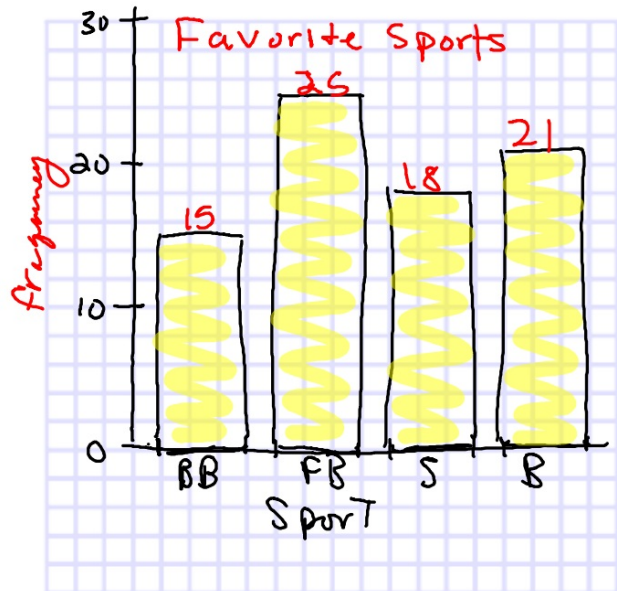
Activity: Favorite sport?

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

↑
Categories



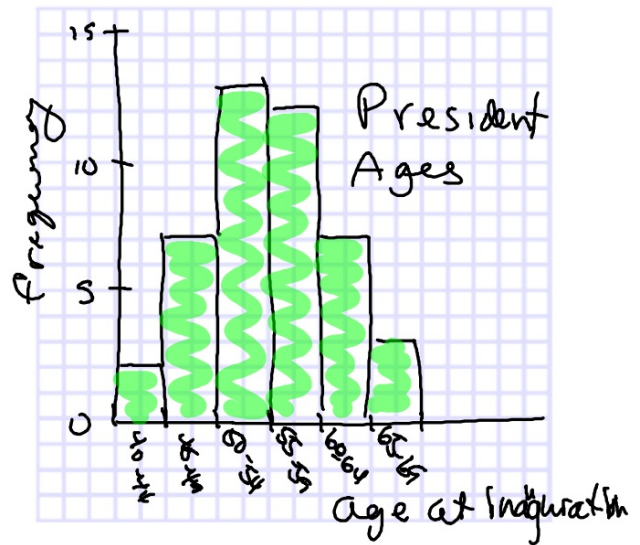
Example 2 Make a Histogram and a Cumulative Frequency Histogram

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

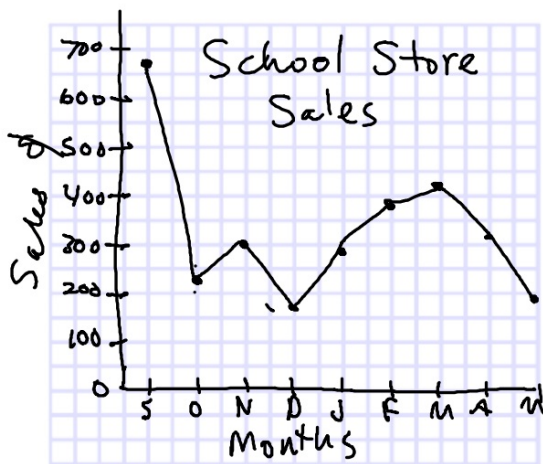




Example 3 Make a Line Graph

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

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

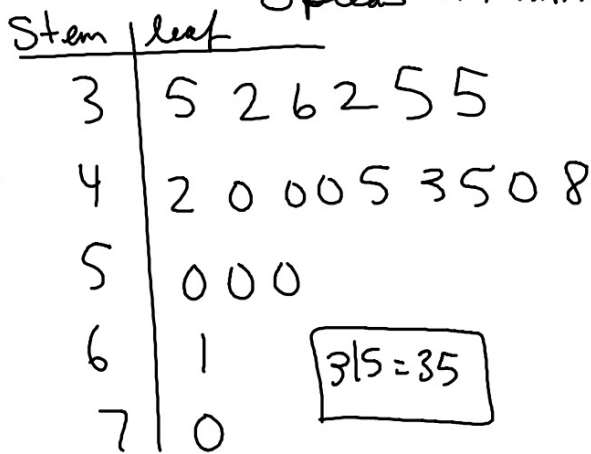


ANIMALS The speeds (mph) of 20 of the fastest land animals are listed at the right. Use the data to make a stem-and-leaf plot.

42	40	40	38	50
32	50	36	50	40
45	70	43	45	32
40	35	61	48	35

Source: *The World Almanac*

Speeds of Animals



mode =
40

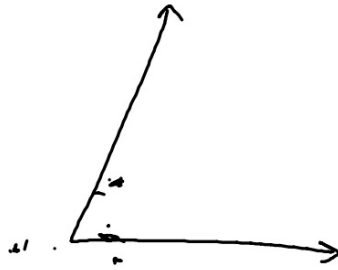
P. P-45 1-5
bought(?)

Angle measuring activity

0-89 acute

90 right

91-180 obtuse



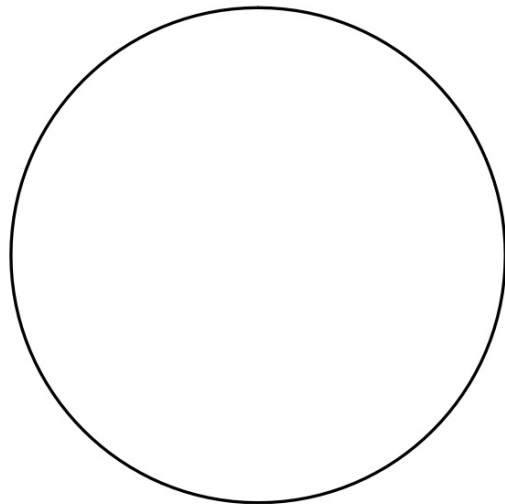
- ① put mark on vertex
- ② line one side with 0°
- ③ read other side

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