## PIE CHART WITH 2 VALUES

- Data is organized as percentages of the whole.
- Add the total number of what's being represented. Calculate the percent in each category. Find the angle by converting one of the percents to a decimal (move the decimal point two places to the left).
- Multiply the decimal by 360°
- Draw a circle with a compass. Draw the radius from the center of the circle to the edge.
- Use a protractor and draw the angle.

Example—The percent of people in my class who play baseball
Count the number of people in the class.
Count how many of them play baseball.
Baseball players/class
$12/30 = .40 = 40\%$ $18/30 = .60 = 6\text{-}\%$
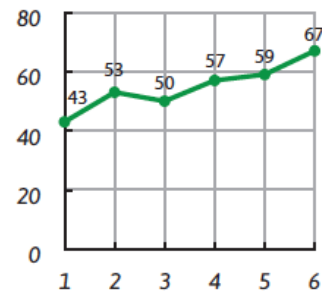$.40 \times 360 = 144°$
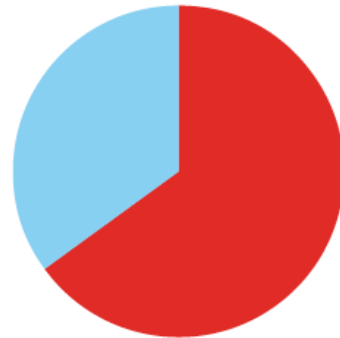
Do not forget to label sections.

LINE GRAPH

- Line graphs can show how something changes over time.
- Two values can be plotted on the axes.
- The Y-axis usually has the numbers or what is being measured.
- The X-axis usually has continuous data of time.

Example—Temperature for a 12-hour period
*Y-axis = Temperature (continuous)*
X-axis = Day of the week (continuous hours)

Do not forget to label the X and Y axes.

HISTOGRAM

- Histograms display numeric data with an order into intervals called "bins"
- The X-axis show the intervals for the data. The labels represent the **lower end** of each interval
- The Y-axis has the frequency (number of pieces of data in each interval)

Example—Number of minutes it takes students in my class to get to get to school.
Y-axis = frequency (number of students)
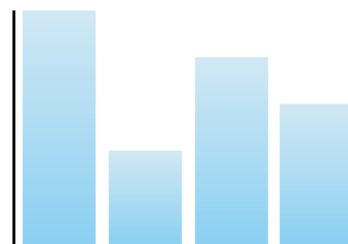X-axis = Minutes to school (each bin is 15 minutes)
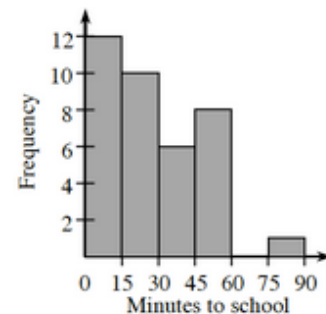
Do not forget to label the X and Y axes

BAR GRAPH

- Data is organized into amount intervals of data shown by bars.
- The bars are of equal widths and equal distances apart
- Usually the Y-axis shows the number of what is being measured. All of the data must fit on the axis
- The X-axis is the **discrete** data such as names, objects, or colors.
- There is one bar per discrete data.

Example—My class's favorite sport
Y-axis = Number of students
X-axis = Sport (baseball, swimming, and so on)

Do not forget to label the X and Y axes.