Section 5.2: Describing Data with Graphs

graphs are a visual way to summarize a data set

for data from a qualitative variable

Can use

univariate data {
- pie chart
- bar chart

- pictograph   - use a picture or pictures to show relative size of categories

(more in Section 5.4)

Section 5.2: cont'd   2023/10/27

for quantitative data

univariate data {
- pie charts
- bar charts
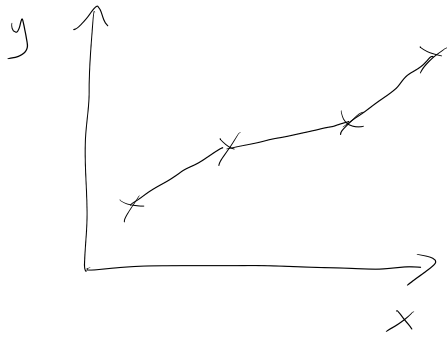
- histograms   (Section 5.3)

for bivariate data, use
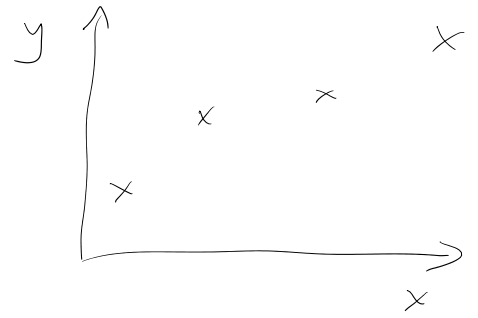
- line graph
- scatterplot

y ↑   ↗   y ↑   x

line graph

– lines join points
to guide the eye

scatterplot

just points

– though you can also
include the "best fit"
line (iff best fit
is appropriate!)

Note: in this course, I will not ask
you to generate graphs. I will ask
you to interpret them.