

Section 15: Histograms

Thursday, January 10, 2019 4:09 PM

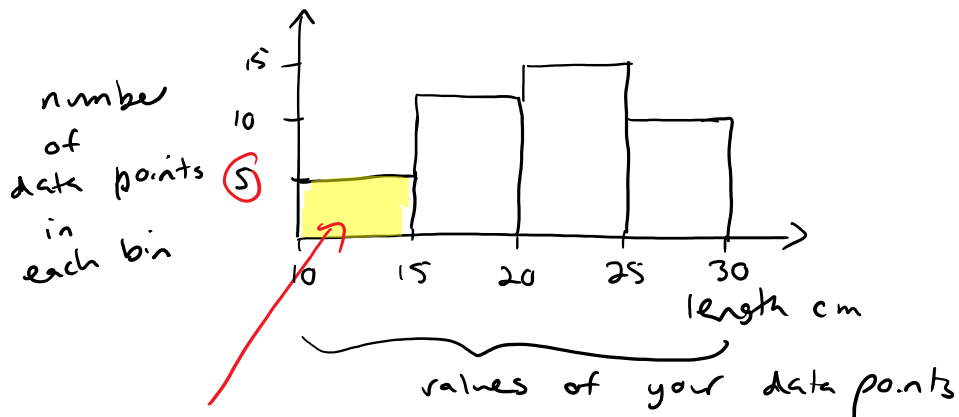
what is a histogram?

let's suppose you have a data set, which looks like this:

ordered list: 11, 11, 12, 14, 14, 16, 18, 19, 19, 20, 21, 21, 21, ...

one way to summarize it:

group the data into "bins"



there are 5 values between 10 and 15 cm

characteristics of the shape of a histogram:

number of peaks:

unimodal

- one peak

bimodal

- two

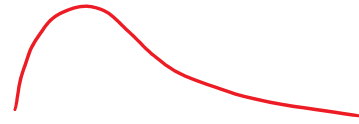
multimodal

- more than two

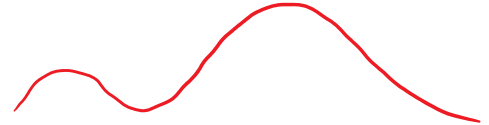
Symmetry - mirror symmetry



Symmetrical

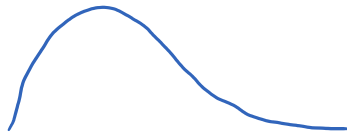


asymmetrical

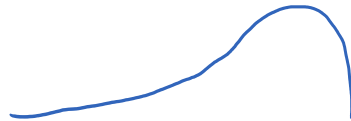


skew : for asymmetrical

unimodal distributions



skewed to the right
(tail is to the right)



skewed to the left