

this variable
 time: types;
 histograms

read: DD Ch. 1, 2
 in both books

AMS7
 4 Oct 18
 ①

next
 time: mean, SD

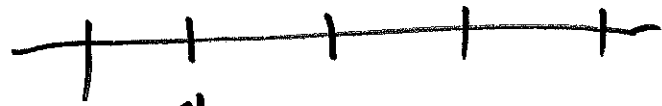
eye
 color



brown blue

qual
 ordinal

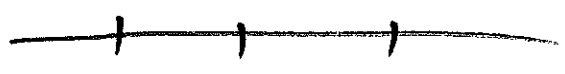
qual nominal



v. slow
 slow

height

leaves



12 13 14 ... quant
 discrete

~~continuous~~
 ②
 continuous
 ratio

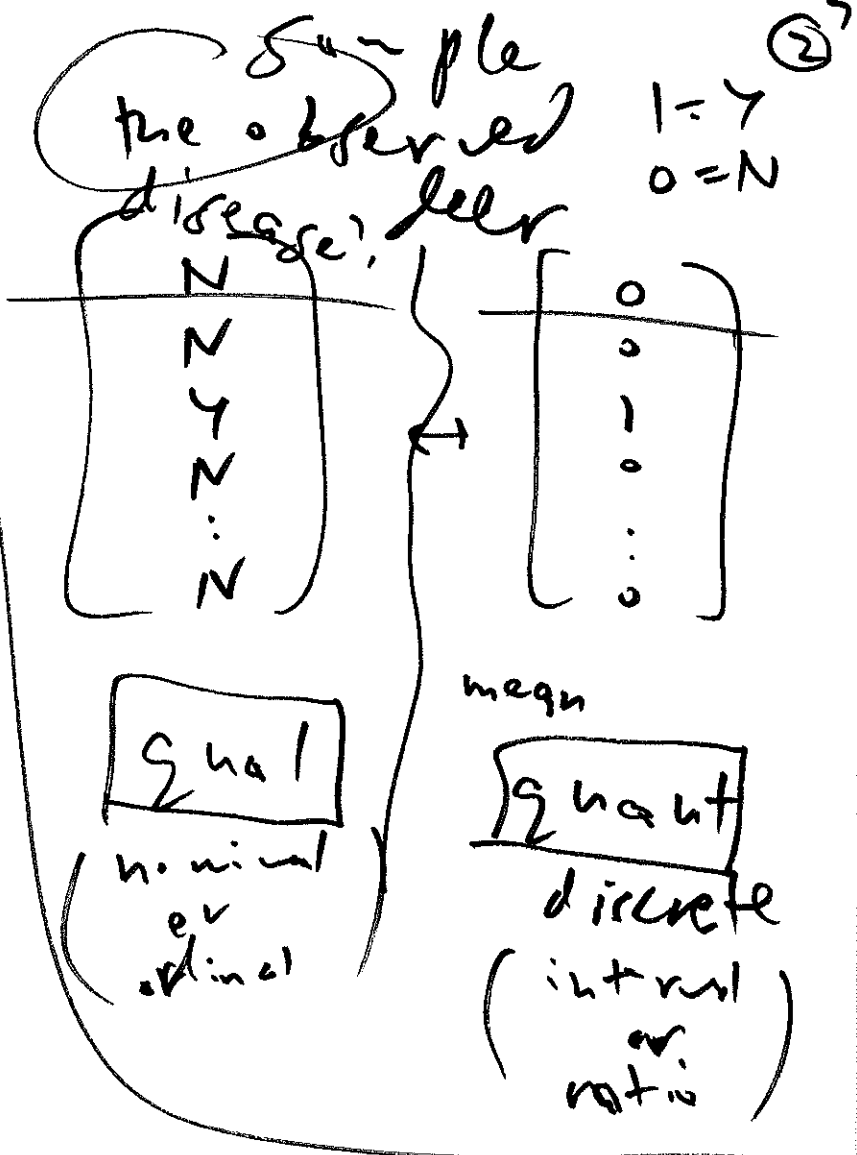
jumps

ratio

	yesterday	today	
max. temp. in S.C.	90°F	45°F	<p>6 interval quant. cont.</p>

descriptive methods

representative = like IID in sampling from a pop.

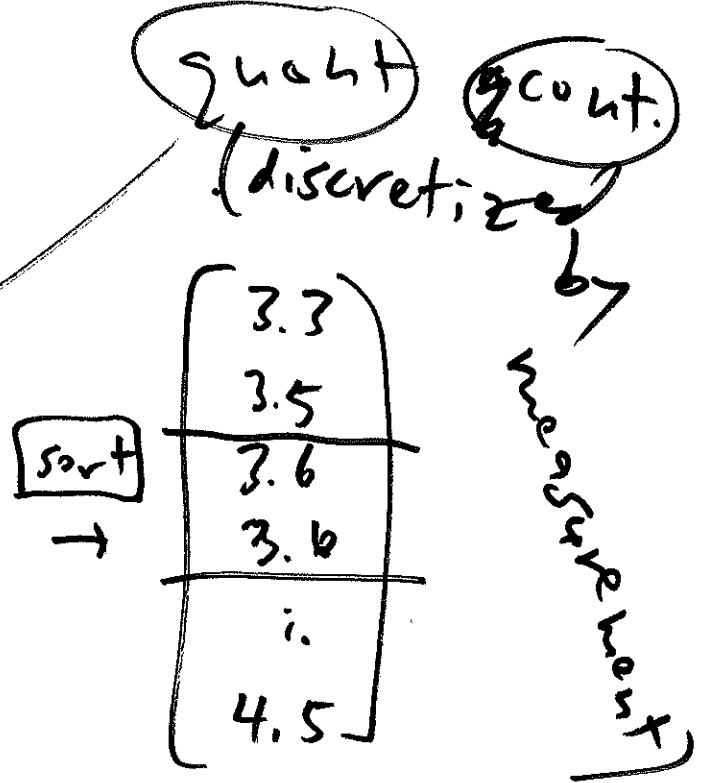


sample the observed butterflies

wing length (cm)

4.4
3.6
4.1
⋮

$h = 24$



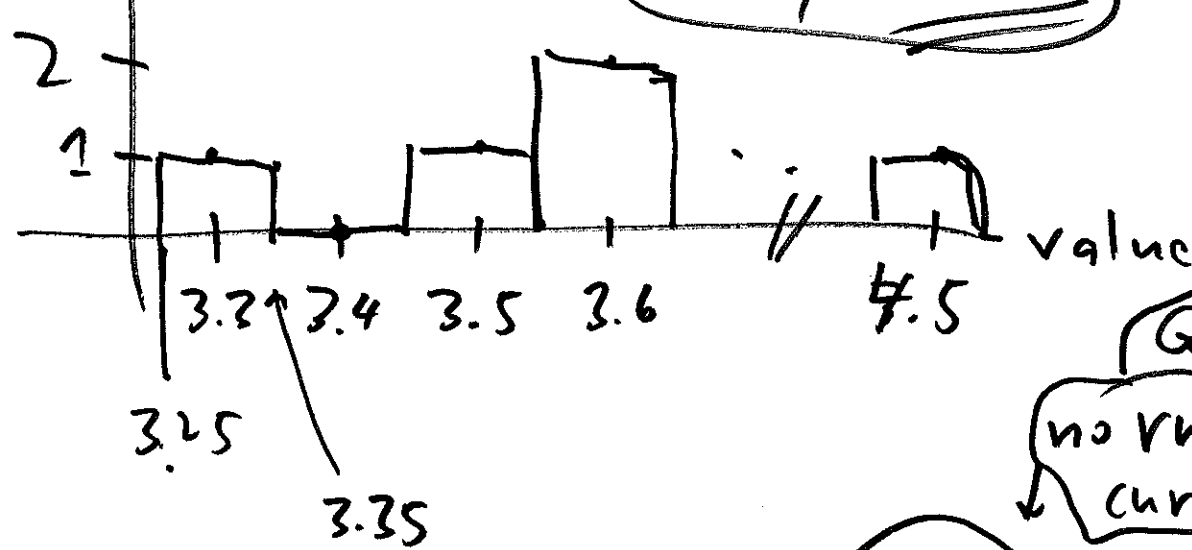
PLAN AREA

raw freq. (count)

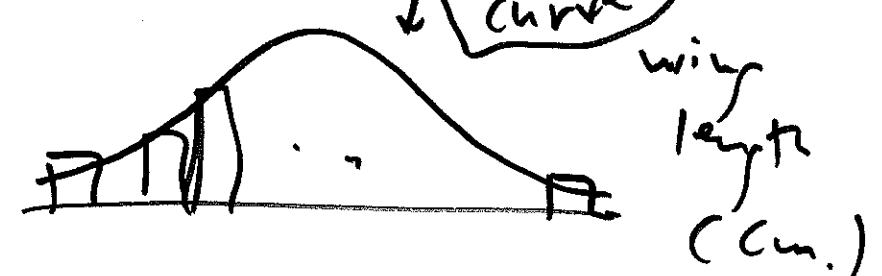
(raw frequency) histogram

special kind of bar graph

only height

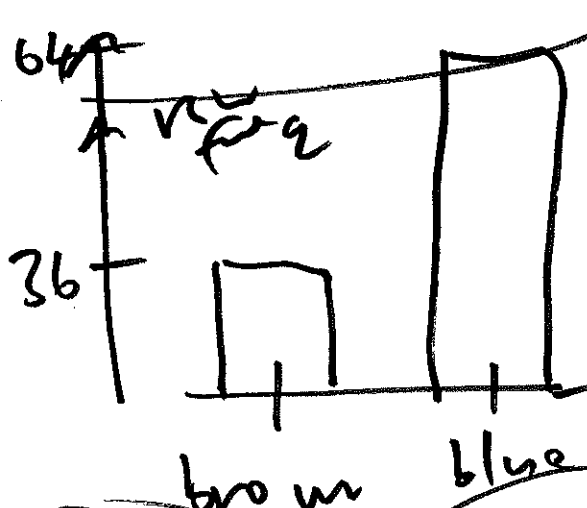


Gaussian dist. normal curve



C.F. GAUSS (1790 - 1840)

A. de Moivre (1710)



eye color

eye color

BR
BL
BR
BR

no shape

n = 100
1 row for each animal

bar graph

value	raw freq.
brown	36
blue	64
<hr/>	
	n = 100

BR
:
BR
BL
BL

36
14

vibe
even
vibe
i

1 row
for
each
nest

qual

nominal

not dich.

(b.g.) bar graph (Y)
hist. (N)

pigmentation

solid black
f. speck.
i

1 row
for
each
sunfish

qual

ordinal

not dich.

b.g. ? (Y)
hist. (N)

pups (litter size)

4
5
4
3
⋮

1 row
for
each
litter

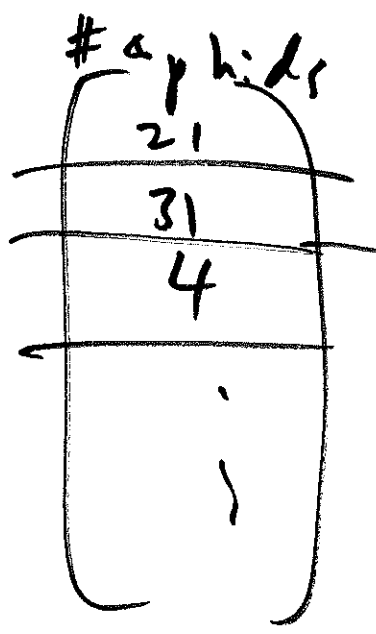
quant.

disc.

ratio

~~b.g.~~ → hist. (Y)

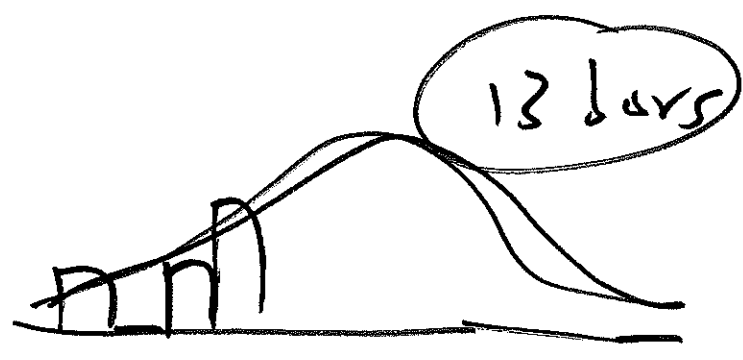




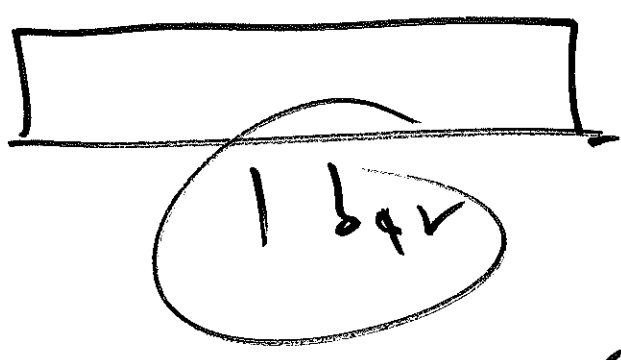
1 row
for
each
cluster
plot

$n = 424$

- ⑤
- quart
- disc.
- ratio
- ~~big~~ hist.
- ⑦

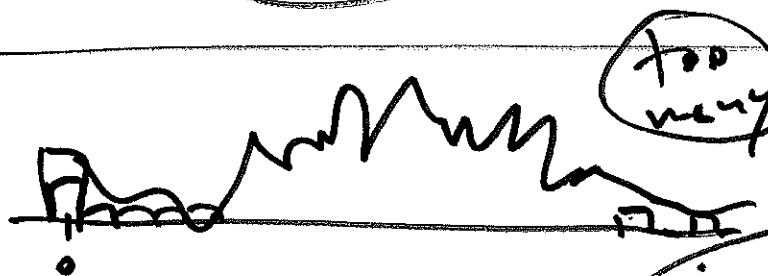


good hist.

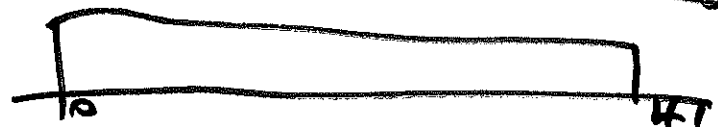


bad hist.

(all shape info. lost)



42 bars
too jittery
bad



too few bars