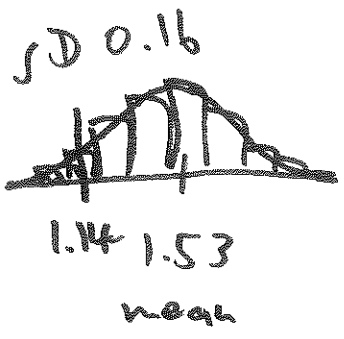


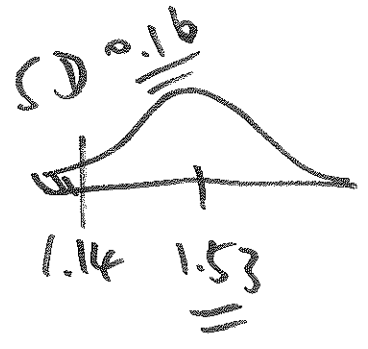
Discussion
Section 2

p. (R-29)

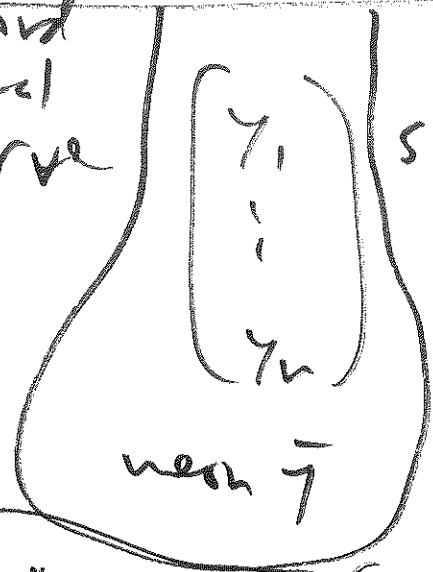
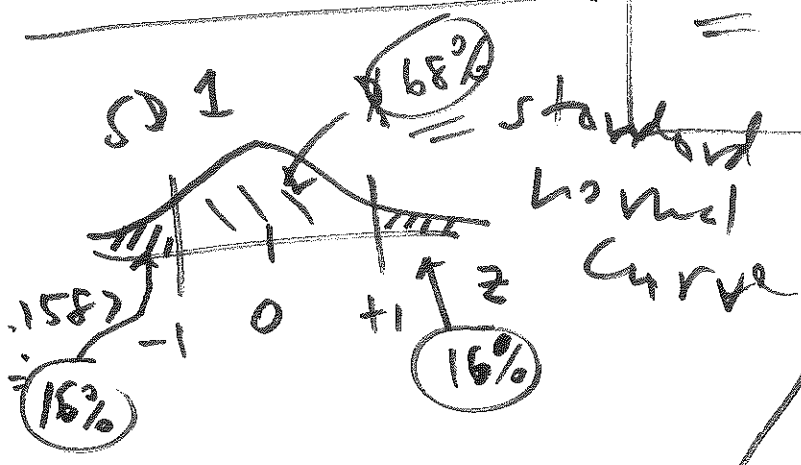


AMS 7
16 Apr 18

3 (b)



on density scale,
relative frequency
= area under curve

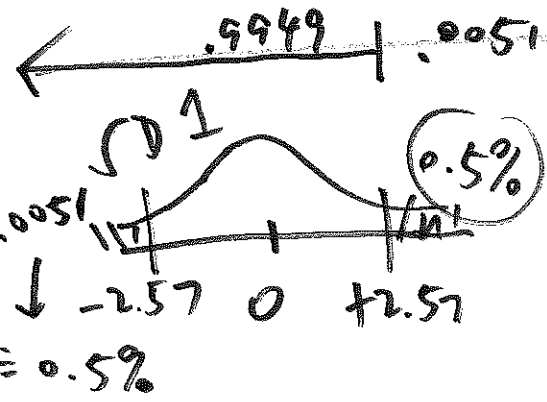
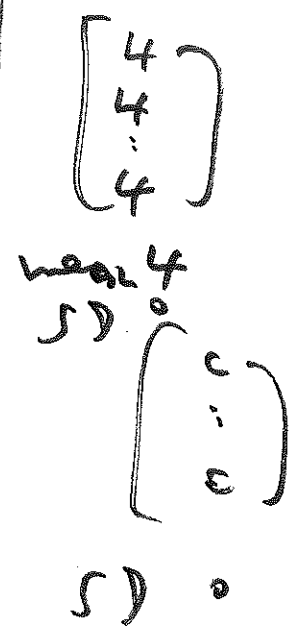
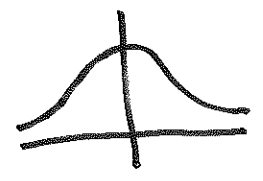


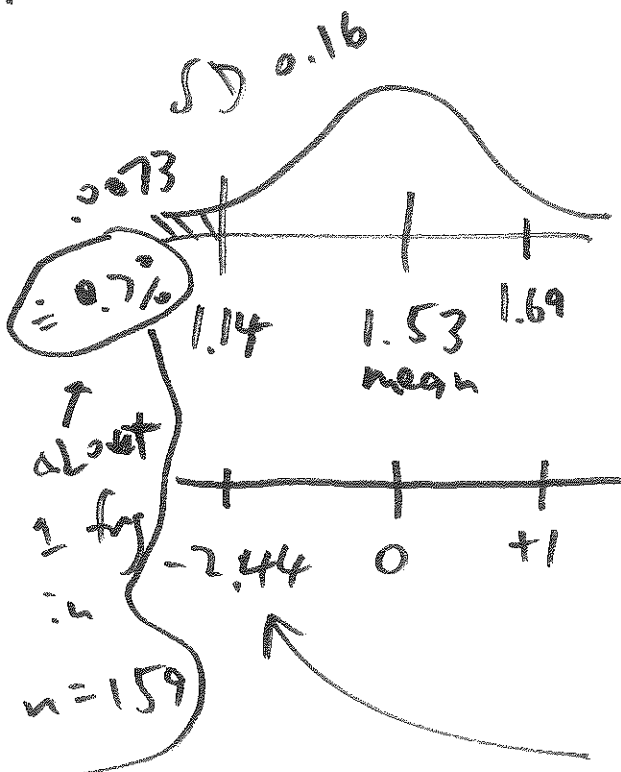
$$s = \sqrt{\frac{1}{n} \sum_{i=1}^n (y_i - \bar{y})^2}$$

Facts about normal curve

① total area under it = 1 (= 100%)

② it's symmetric





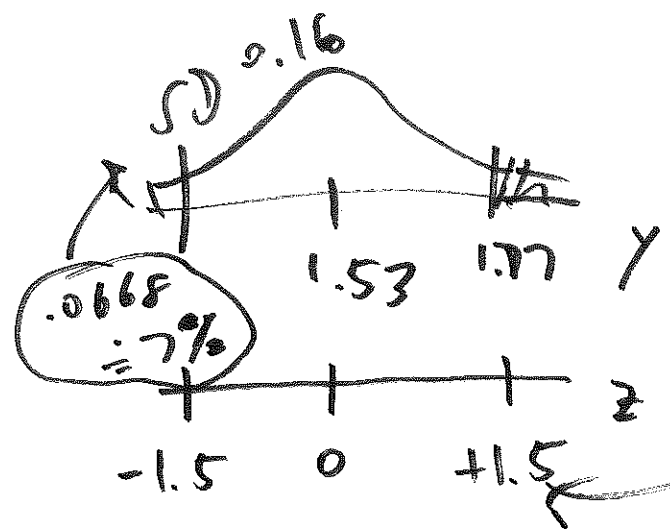
raw units axis (y)

standard units axis (z)

$$-2.44 = \frac{-0.39}{0.16}$$

$$= \frac{1.14 - 1.53}{0.16}$$

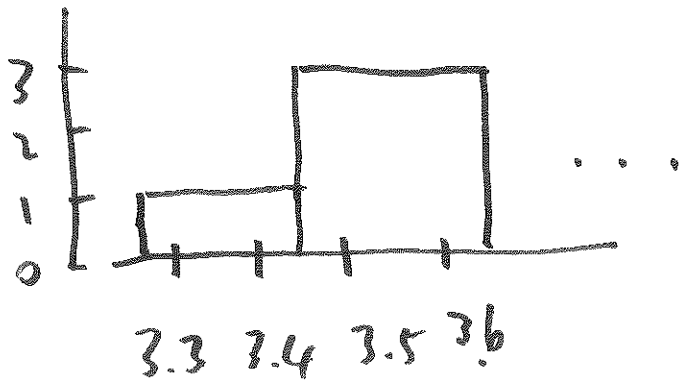
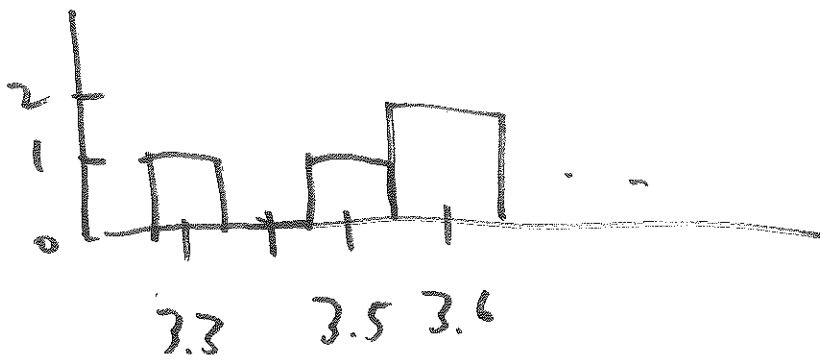
$$z = \frac{y - \bar{y}}{s}$$



to convert to standard units:

$$\frac{\# - \text{mean}}{SD} = z$$

$$\frac{1.77 - 1.53}{0.16} = \frac{+0.24}{0.16} = +1.5$$

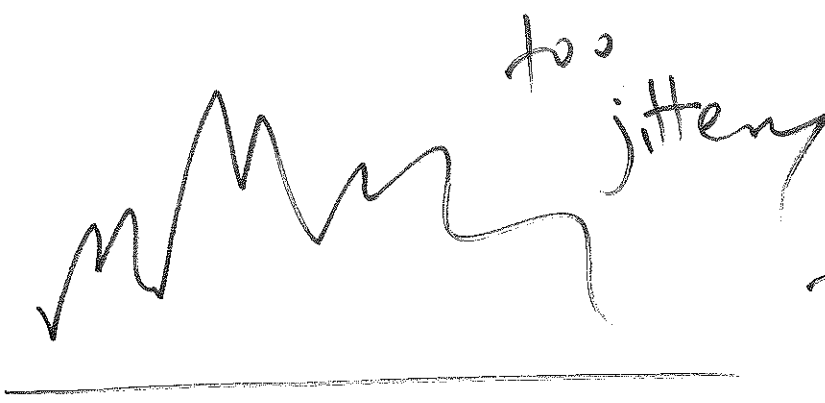


① sort raw data

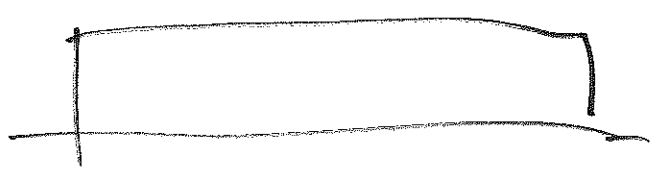
② make raw freq. table

raw freq	value	raw freq.
1	3.3	1
	3.4	0
3	3.5	1
	3.6	2
	3.7	1

4.5 | 1
h = 24



too many dots



too few dots