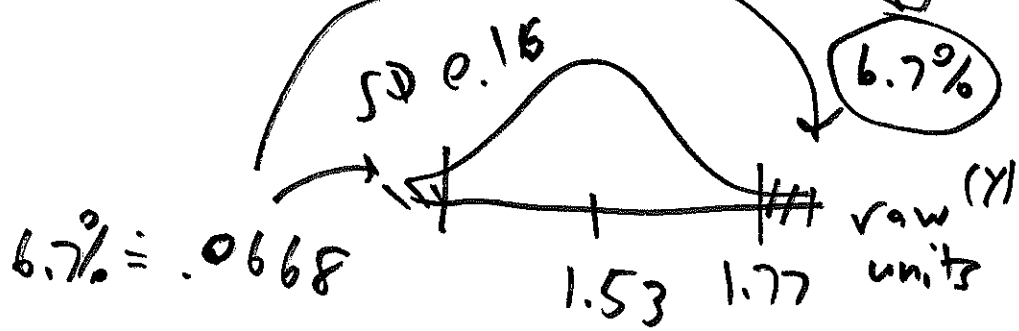
Discussion Section, week of 15-19 oct 18

Disc. sec. 2, p. R-(29)

AMS 7 15oct18 ①

3(a)



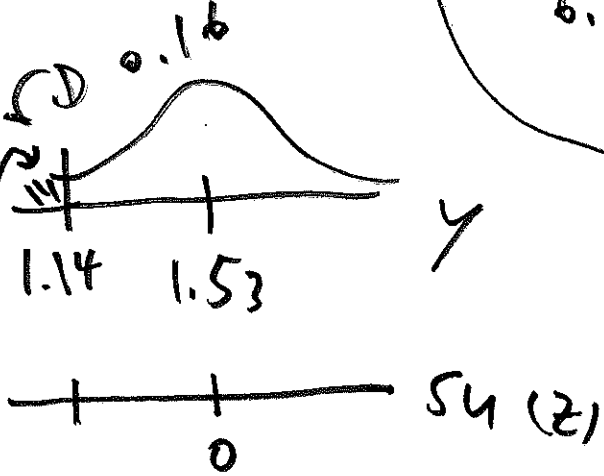
6.7% ≐ .0668

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

$= \frac{+3}{2}$

$= +1.5$

3(b)



$\frac{1.14 - 1.53}{0.16} = \frac{-0.39}{0.16}$

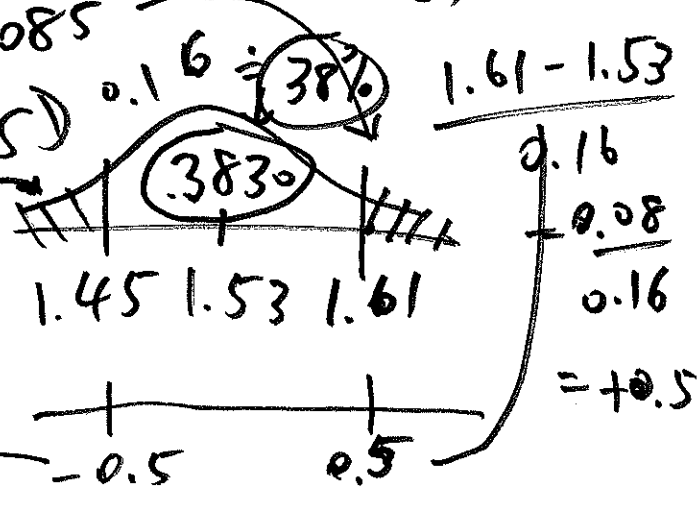
$= -2.44$

.0073 ≐ 0.7%

(159)(.0073) ≐ 1.1607

≐ 1 frog

3(c)



$\frac{1.61 - 1.53}{0.16}$

$\frac{0.08}{0.16}$

$= +0.5$

$\frac{-0.08}{0.16} = \frac{1.45 - 1.53}{0.16}$

$= -0.5$

experimental design	enriched environment	treatment group (T)
case study: psychobiology	deprived environment	control group (C)

design 0: get 120 rats, put them all in T group, see what cortex weights result

bad: no comparison group

- Y = outcome (cortex weight)
- X = treatment → T / C

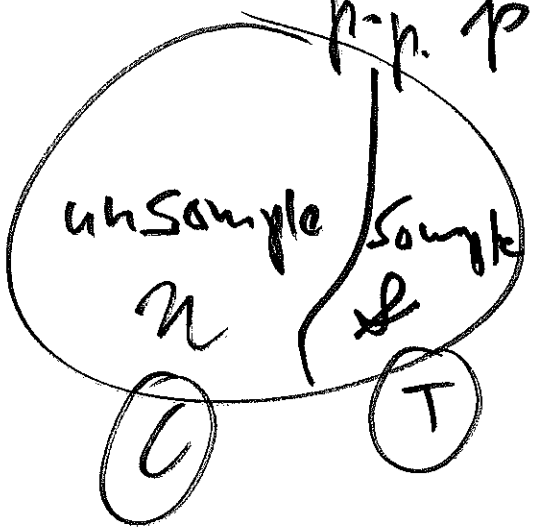
goal: * try to make T, C groups as similar as possible in all relevant ways except for T/C distinction

Z_1 = potential confounding factor (PCF)

3rd variable, not X, not Y, but capable of confusing (confounding) us about whether changes in X cause changes in Y

in psychology case study

an important Z_1 is genetic background



simplest way to achieve goal ⊛: assign experimental subjects to T, C at random

4(a)

→ time

(longitudinal)

(repeated-measures)

each person serves as his/her own control

1 = Y
0 = N

(0) → relief?

conventional	acupuncture (T)
0	0
0	1
1	1
⋮	⋮
0	1

n = 31

1 row for each person

(4)

mean 0%   mean $\frac{30}{31} \doteq 97\%$