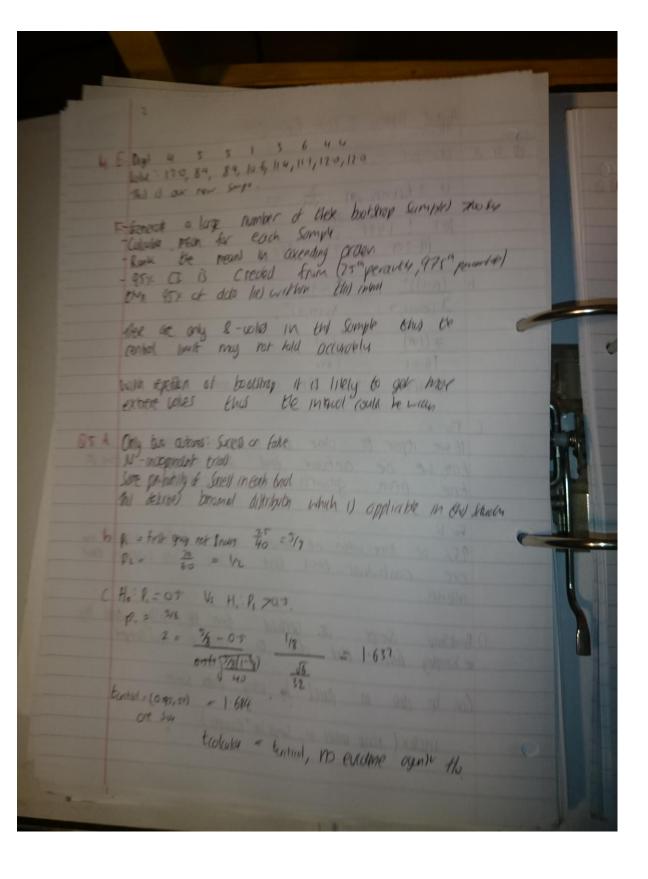
Applied Poddelly 2 From Paper 2011 Q UA. U= 105 02 = 109 U = toll-orp ,4) Ja 10.5 + 3.499 58. (9.208 ,11.792) 94% (1 b (n-1)52 (n-1)52) (0,025,7) (0,975,7) 7 (109) 7 (109) (0.476, 4.513) 95% CI for various (For a: If we repeat the above less in the similar monrar, 99% of 8 time we are confident that our internal contain to true mean growth role of plant For bi 95% of thre when we simple ander similar conquer of cre contident that the varione ne within this Menel O Bootstrap Sample ar gerarded from the existing date by resumpling from their date to create a new sample Can be doe in excel by why moves funcion Inclex (runge when in, sumpresso* Runou)



Applied Probability 2 Exam Paper 2011 Q5 di 1f pi=pz then both simples come from the same distribution, and hence pi should egod pz. 1/2 p would be 45+60 = 055 which would be a reasone almon - Under assumption both core from some dillaboration - aloud bootstrop samples on be generated from the combined (00 value) Due using exicls index funtan (range, signs see RANDI) -Generale a bootstrop of 40 for hypthes and 60 for non all from the combed sample 11 95% (I for boutstrop 1) (25th percentile, 975th percentile) dependent on 95th perentle = 0160 zero is less than this 0-160 so we connot reject Ho that Pi=Pz. to the dole doe out he or Type 1: probability of according a null hypotheris when a 1) true type 2: probability of accepting an allernole hypothicum is 1) fulse Type I can to reduced by decreasing alpha, to decome alpha, to decome probability or mount a type II err.

69. We have data $x_1, x_2 \dots x_n$ normally distincted

mean $M = \overline{x} = \frac{1}{n} \stackrel{?}{\underset{\longrightarrow}{}} x_1 \dots x_n \stackrel{?}{\underset{\longrightarrow}{}} = \frac{1}{n-1} \stackrel{?}{\underset{\longrightarrow}{}} (x_1 - \overline{x})^2$

From property of normal dillhhon, the value!

Z, = X,-\nu, z_2 = \frac{\chi_1}{2} \tau, \quad \tau, \quad \tau \text{ or } \quad \text{ or

In practice, with a dala set of size N, It I) eaself 60 look at the lw 1/12, 100 2 th, ... 100 th percention

because bey correspond exolly to each do port words.

If we do a sotter por of the z-sione of the kin ordered observan in order against the expected z-sione or K/n+1, all the above imples that they should be on shoots like y-x

in the data does not be on a swaight line, thus it an be concluded their the data is nor normally distributed.

the love the log of the valles, it is litely be valued will thin be normally distributed with all of use inverse by etc.

