Test 2 Cribsheet

April 1, 2016 12:18 PM

※ Areas for critical values Z: Middle
(negative if < / positive if >) F: Tail / t: Tail ($\alpha/2$ if two tailed / $\alpha/2$ if two tailed)

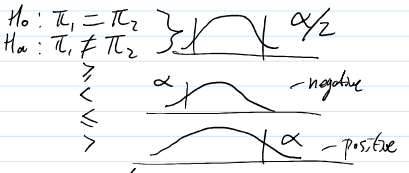
Critical Values

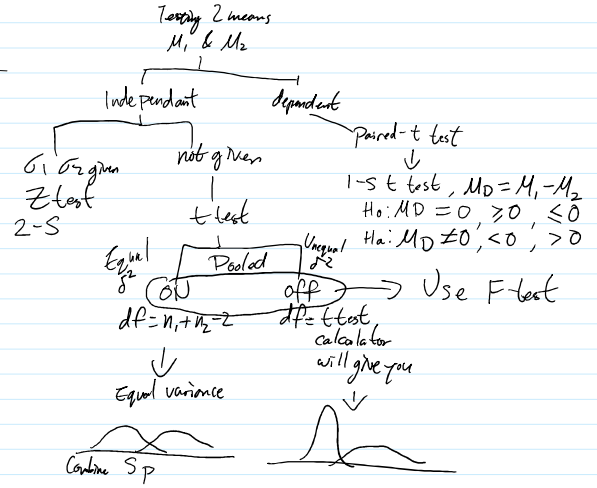
Degree of freedoms, finding Critical Values
F test: Fu: ndf = $n_1 - 1$, ddf = $n_2 - 1$; F_L: $\frac{1}{F_U^*}$ < ndf = $n_2 - 1$, ddf = $n_1 - 1$
t test: Pooled ON: $df = n_1 + n_2 - 2$
Pooled OFF: run t test pooled OFF, use df given

Paired (dependent) t-test: $df = n - 1$

12.3 For dependent t-test:
1-S
$\mu_D = \mu_1 - \mu_2$
$\mu_D \gtrless 0$

12.4 2-S Z test for π
Z test 2-P
2. testing 2 proportions π
π_1 π_2 ⇒ Z test





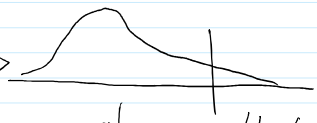
Anova table - sig = for difference in means

3. ANOVA testing more than 2 means
$\mu_1, \mu_2 \ldots \mu_c$
$H_0: \mu_1 = \mu_2 = \mu_3 \ldots = \mu_c$
1) H_a: At least one μ_j is different
2) H_a: Not all the μ_j are equal

C = Categories
n = total #

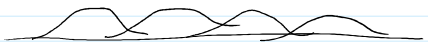
Variation	Df	Sum of ^2	Variance	F
Among	c-1	SSA	MSA= SSA/c-1	Fstat= $\frac{MSA}{MSW}$
Within	n-c	SSW	MSW= SSW/n-c	
Total	n-1	SST		

Anova F Test - One Way → Fcalc
F C.V. →



always right tail, positive

Conditions: 1) Random & independent (given)
2) Normally distributed
Test 3) Equal variances



↳ Use SPSS P value to see from F test
H_0 σ_1^2 σ_2^2 $\sigma_3^2 \ldots \sigma_4^2$ all same
H_a: at least one different

☆ 11111 22222 for calculator
Fcrit ndf = C-1
ddf = n-C
area = α
(only upper)