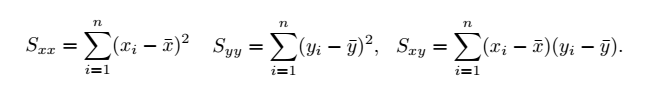
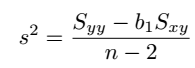
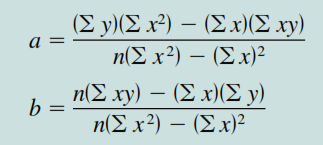
**Formula Sheet: Probability and Stats**

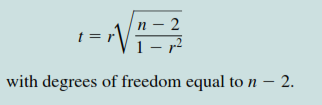
1. t-tests: (a) (b) t =
2. Coefficient of correlation = r =
3. Test of linearity for regression coefficient:



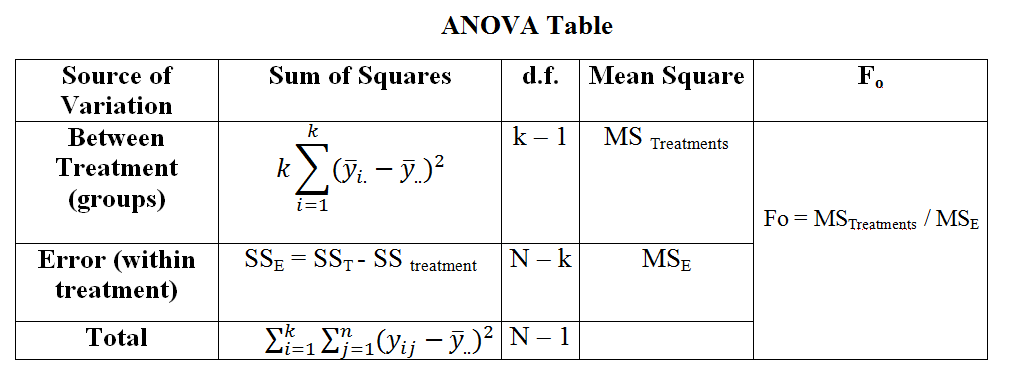


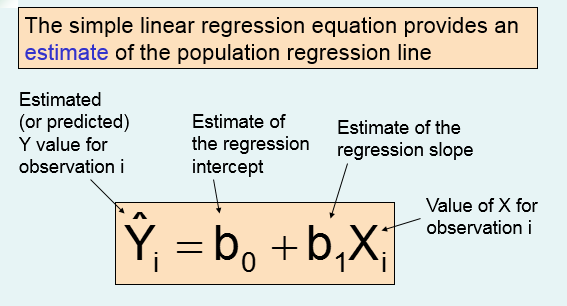
Determining Regression Equation



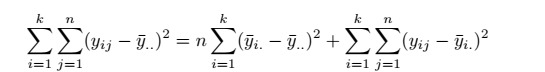
Hypothesis testing for Correlation : 

Simple Linear Regression Model: 

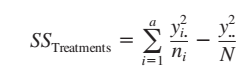




**ANOVA :**



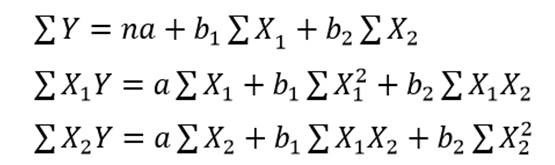
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****

**Multiple regression Model:**

**Y = α + β1X1 + β2X2 + ε**

**Normal Equation:**

****

**t-test: (a) , t = t =**

**Coefficient of correlation= r =**

**Multiple correlation coefficient: R =**

**Standard error = , pooled Variance :** 



**Related Populations The Paired Difference Test : Di = X1i - X2i** , 



**Hypothesis tests for µ1 - µ2 with σ1 and σ2 unknown and not assumed equal:**



**Or Take : V = n-2 , with the least data value (Rule of thumb) see problem in book or ppts.**

**Note : Students this formula sheet is prepared from PPts however some formulas are missing while you practice problem Remember them.**

**Only selected formulas will be provided in Final Exam Papers , so make sure you have remember some Formulas.**