

ANOVA:

①	②	③
51	23	56
45	43	
33	23	76
45	43	74
67	45	87
		56

1) Set the hypothesis first $H_0 = \mu_1 = \mu_2 = \mu_3$

Alternative hypothesis $\mu_1 \neq \mu_2 \neq \mu_3$

2) $\alpha = .05$

3) Degree of freedom between groups $k-1 = 3-1 = 2$

degree of freedom within equals to $= N - k = 15 - 3 = 12$

~~df = 8 (6+2)~~ 14 (12+2).

Fact = 3.89 (F) (Critical value).

4) Calculate F Statistic $= \frac{S_{01}}{S_{02}} =$

Variance Calculation.

mean group 1: 48.2 mean group 2 = 35.4 group 3 = 69.8

variance is 153.2 Group 2: 128.8 Group 3 = 183.2

grand mean: avg. with group is $(G_1 \text{ mean} + G_2 \text{ mean} + G_3 \text{ mean}) / 3$
 $= 155.06$

Group mean = $767 / 15 = 51.13$

S Sumwhole $= \sum (x - \bar{x})^2 = (51.13 - 51)^2 + (45 - 51.13)^2 + (51.13 - 33)^2 + \dots$

$= (-.13)^2 + (-6.13)^2 + \dots$
 $= 4883.735$