

Problem 6, Section 10.4

Null hypothesis: $H_0 = \mu_1 = \mu_2 = \mu_3$

Alternative hypoth $H_a =$ at least one is different <--- **CLAIM**

Group size 35	Group size	Group size 24/24F
90	100	115
90	75	75
75	105	75
105	110	90
65	90	110
	90	90

Anova: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
Column 1	5	425	85	237.5
Column 2	6	570	95	160
Column 3	6	555	92.5	287.5

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	288.9706	2	144.4853	0.634602	0.54473	3.738892
Within Groups	3187.5	14	227.6786			
Total	3476.471	16				

From the data analysis, we see that the test statistic is **F=0.634602**

Rejection region

d.f._N= k-1= **2**

d.f._D= N-k= **14**

From the F-distribution table we have rejection region $F_0 > 7.92$

Therefore we fail to reject the null hypothesis

Statement: "**There is not sufficient evidence to support the claim.**"